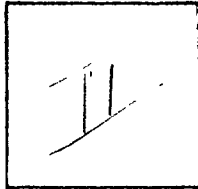


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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) A total of 132 single- and multi-day outdoor environmental chamber experiments were conducted in this program involving nine different aviation and automotive fuels. These included the petroleum-derived JP-4 and JP-8 military aviation fuels, their shale-oil derived analogues, unleaded gasoline, diesel No. 2 fuel, and the experimental high-energy cruise-missile fuels JP-10, RJ-4, and RJ-5. The program was conducted to assess the potential of		

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these fuels to adversely affect air quality.

This is Volume II of the report. Due to printing limitations, Volume II consists of two separately bound parts which contain the detailed data sheets for the outdoor chamber experiments. This is Part I of Volume II.

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ATMOSPHERIC CHEMISTRY OF HYDROCARBON FUELS

VOLUME II: OUTDOOR CHAMBER DATA TABULATIONS (PART I)

WILLIAM P. L. CARTER, PAUL S. RIPLEY,
CECIL G. SMITH, AND JAMES N. PITTS, JR.

STATEWIDE AIR POLLUTION RESEARCH CENTER
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FINAL REPORT
MARCH 1980 - SEPTEMBER 1981

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PREFACE

This report was prepared by the Statewide Air Pollution Research Center (SAPRC) of the University of California, Riverside, California 92521, under program element 1900, project 20, subtask 20, with the Air Force Engineering and Services Center, Tyndall Air Force Base, Florida 32403.

This report is presented in two volumes. Volume I contains a description of the experiments conducted under this program and a discussion of the results obtained. Volume II contains the detailed data sheets for the outdoor chamber runs in two separate parts. This is Volume II, Part I.

The work was performed during the period March 1980 through September 1981 under the direction of Dr. James N. Pitts, Jr., Director of SAPRC and Principal Investigator, and Dr. William P. L. Carter, Project Manager.

The principal research staff on this program were Mr. Paul S. Ripley and Ms. Cecil G. Smith. Drs. Roger Atkinson and Arthur M. Winer (Assistant Director of SAPRC) participated in the supervision of this program, in technical discussions, and in the preparation of this report.

Assistance in conducting this program was provided by Mr. Dennis R. Fitz, Ms. Sara M. Aschmann, Mr. Frank R. Burlason, Ms. Margaret C. Dodd, Mr. Robert E. Burkey, Jr., Ms. JoMarie Faulkerson, and Mr. Glen C. Vogelhaar. The gas chromatographic-mass spectrographic analyses were conducted by Mr. Thomas S. Fisher, and assistance in processing the data was provided by Mr. Jeffrey Everett, Mr. Joseph P. Lick, and Ms. Laurie A. Willis.

Appreciation is expressed to Ms. Christy J. Ranck, Ms. I. M. Minnich, Dr. Marian C. Carpelan, and Ms. Minn P. Poe for assistance in the preparation of this report.

The support and contribution to the conduct of this program by Dr. Daniel A. Stone, Project Officer, Maj. Ron Channell, and LtCol. Michael MacNaughton, Chief of the Environmental Sciences Division at the inception of this program are gratefully acknowledged.

This report has been reviewed by the Public Affairs Office (PA) and is releasable to the National Technical Information Service (NTIS). At NTIS it will be available to the general public, including foreign nationals.

This technical report has been reviewed and is approved for publication.

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TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
I	INTRODUCTION.....	1
II	OUTDOOR CHAMBER DATA LISTINGS.....	5

LIST OF TABLES

<u>Table</u>	<u>Title</u>	<u>Page</u>
1	Representative Abbreviations Used in the Data Tabulations...	3

SECTION I

INTRODUCTION

In order to investigate the atmospheric impact of releases of hydrocarbon fuels used in military aircraft operations, and to obtain a data base from which the atmospheric reactivities of different types of military and commercial fuels can be compared, a series of outdoor environmental chamber irradiations, employing natural sunlight, were performed under contract for the United States Air Force. The military fuels studied included both petroleum- and shale-derived JP-4 and JP-8, the experimental high-energy cruise missile fuels JP-10, RJ-4, and RJ-5, and, for comparison purposes, the commercial fuels diesel No. 2 and unleaded gasoline. In this volume, the detailed data tabulations for these outdoor chamber irradiations employing these fuels, and the associated array of control and chamber characterization experiments, are given.

The data tabulations, given in section II of this volume, include the following information for each run (where applicable):

- The Air Force Fuels (AFF) run number, ranging from AFF-2 through AFF-132, excluding AFF-96. (Data for runs AFF-1 and AFF 96 are not included because these were aborted before usable data were obtained).
- A brief run description.
- The date the run was performed (below run description).
- The date the tabulation was printed (right hand corner on each page).
- Comments for the run. These include: major operations or observations taken from the laboratory log book; problems encountered during the run (where applicable); major calculated results (for characterization runs such as O_3 decays, pure air photolyses, NO_x -air irradiations, etc.) and (for multi-day runs) daily averages of temperature and UV intensity.
- Summaries of overall averages of all measurements of temperature, UV intensity, and (in some cases) dew point.

- Initial concentrations of NO, NO₂, total hydrocarbon, and (for n-butane runs) n-butane.
- Lists of all instruments used in these runs (including in some cases instruments whose data are not reported on the sheets (see below). For each instrument, this list indicates the ID number (used internally at SAPRC), the label identifying the instrument on the data tabulation, and a brief description giving information identifying the instrument and/or technique.
- The data tabulations. The tabulations indicate the compound or parameter measured, the units in which the measurements are reported, the instrument, and (for dual chamber runs) the chamber side number. Because of space and format limitations, the compound and parameter names and the units of the measurements frequently had to be abbreviated on the tabulations. The meanings of representative abbreviations which may not be obvious are listed on Table 1. For each data point, the day ("DY"), the clock time (always Pacific Standard Time), and the elapsed time (in minutes) since the chamber was uncovered (or since the first measurement for dark runs) are indicated.
- If any of the data are flagged (indicated by an "A", or "B", etc., immediately to the right of the value), footnotes giving the reason it is flagged appear at the end of the tabulation for the run.

A number of measurements were made which are not reported on the tabulations in order to reduce their bulk. These include primarily gas chromatographic measurements of low levels of trace species present in the pure air used for the fuel runs, methane (which is always present at its approximate atmospheric background levels, and is inert), and unidentified or minor fuel components. These data are kept on file at the Statewide Air Pollution Research Center (University of California, Riverside, CA 92521-0312) and are available upon request. In addition, the entire data set is available in computer-readable format, and information concerning this is available from Dr. William P. L. Carter at the above address.

TABLE 1. REPRESENTATIVE ABBREVIATIONS USED IN THE DATA TABULATIONS.

<u>Chemical Species</u>	
<u>Abbreviation</u>	<u>Meaning</u>
N02-UNC	NO ₂ readings, uncorrected for interferences by peroxyacyl nitrates and other organic nitrates.
I-C4=	1-Butene
I-C4=	Isobutene
I-C5	2-Methyl butane (isopentane)
N-C5	n-Pentane
CYCL-C5	Cyclopentane
C5-ISOMS	Unidentified pentane isomers
O-XYL	ortho-Xylene
M+P-XYL	meta + para Xylenes (not separated)
C2BENZ	Ethylbenzene
I-C3-BZ	Isopropylbenzene
124TMEBZ	1,2,4-Trimethylbenzene
ACETALD	Acetaldehyde
MEK	Methyl ethyl ketone
PAN	Peroxyacetyl nitrate
C4-N-2	2-Butyl nitrate
THC	Total hydrocarbons
NMHC	Non-methane hydrocarbons

<u>Aerosol Parameters</u>	
<u>Abbreviation</u>	<u>Meaning</u>
CONDENS	Condensation nuclei
#PART>.5	Number of particles > 0.5 microns diameter
AER.V	Aerosol volume
AER.N	Aerosol number (total number of particles)
AER.S	Aerosol surface area
PART.075	Number of particles in the size range centered at 0.075 microns diameter

TABLE 1. REPRESENTATIVE ABBREVIATIONS USED IN THE DATA TABULATIONS

(concluded).

<u>Units of Measurement</u>	
<u>Abbreviation</u>	<u>Meaning</u>
MW/CM2	Milliwatt cm^{-2}
PART/CC	Particle cm^{-2}
10E3/CC	(Particle cm^{-3}) $\times 10^{-3}$
10-4 M-1	(Meter $^{-1}$) $\times 10^4$
UM3/CC	Micrometer 3 cm^{-3} or parts-per-trillion by volume
UM2/CC	Micrometer 2 cm^{-3}
RAW DATA	Arbitrary units; no calibration factor is available

AFF- 2
PURE AIR PHOTOLYSIS
1980 JUN 4-6

(JUNE 4)

1045: FILL STARTED.

1210: FILL ENDED.

1235: BAG DIVIDED.

NOTE: SOLENOID VALVE FOR SIDE 2 BROKEN, NO IRRADIATION ON JUNE 4.

DAY 1 (JUNE 5)

0826: BAG UNCOVERED, T=0

WEATHER: CLEAR AND SUNNY.

NOTE: ONLY SIDE 1 SAMPLED.

1610: SAMPLING ENDED, DAY 1, BAG LEFT UNCOVERED.

DAY 2 (JUNE 6)

0801: SAMPLING STARTED.

1210: WEATHER: SUNNY, CLEAR.

1310: SAMPLING ENDED, RUN OVER.

RESULTS	DAY 1	DAY 2
-----	-----	-----
AVG.T(DEG.C)	29(+5)	28(+5)
AVG.UV(MW/CM2)	3.1(+0.91)	2.4(+1.5)
03 FORM.RATE(PFB/HR)	1.6	1.0

T=0 AT 826 PST

BAG NO. 14 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	28.6	4.4	DEG C
UV RAD	EPPLEY	2.81	1.18	MW/CM2

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479
4300	TSI 023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4850	BK6800-1	BECKMAN HYDROCARBON GC MD 6800 SN100015D
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038-2
4130	EPPLEY	ARB LAB; EPPLEY 11692 UV RADIOMETER

AFF- 2
PURE AIR PHOTOLYSIS
1980 JUN 4-6

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY	AER. UM3/ TSI 0
1 800	-26	-----	-----	-----	-----	-----	-----	-----
1 813	-13	-----	0.010	-0.002	0.008	19.8	-----	2
1 1000	94	-----	-----	-----	-----	-----	1.49	-----
1 1005	99	0.006	0.010	-0.003	0.008	26.9	-----	1
1 1100	154	-----	-----	-----	-----	-----	3.45	-----
1 1105	159	0.007	0.011	-0.003	0.009	28.5	-----	2
1 1200	214	-----	-----	-----	-----	-----	4.03	-----
1 1208	222	0.011	-----	-----	-----	31.7	-----	1
1 1300	274	-----	-----	-----	-----	-----	3.72	-----
1 1305	279	0.010	0.011	-0.003	0.010	32.5	-----	-1
1 1400	334	-----	-----	-----	-----	-----	3.18	-----
1 1405	339	0.012	0.011	-0.003	0.009	32.0	-----	0
1 1500	394	-----	-----	-----	-----	-----	2.73	-----
1 1505	399	0.014	0.010	-0.003	0.008	31.5	-----	2
2 900	1474	-----	-----	-----	-----	-----	0.74	-----
2 907	1481	0.010	0.010	-0.003	0.008	22.8	-----	2
2 1000	1534	-----	-----	-----	-----	-----	1.38	-----
2 1005	1539	0.012	0.010	-0.003	0.007	24.9	-----	2
2 1200	1654	-----	-----	-----	-----	-----	3.56	-----
2 1205	1659	0.013	0.010	-0.003	0.007	31.9	-----	-1
2 1300	1714	-----	-----	-----	-----	-----	3.79	-----
2 1305	1719	0.014	0.010	-0.004	0.008	32.2	-----	0

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	METHANE PPM BK6800-1	PART.024 PART/CC TSI 023	PART.042 PART/CC TSI 023	PART.075 PART/CC TSI 023	PART.133 PART/CC TSI 023	PART.237 PART/CC 023	PART. PART/CC TSI 0
1 813	-13	-----	1002.	-87.	0.	96.	-25.	7
1 1005	99	-----	0.	0.	44.	24.	0.	0
1 1105	159	-----	167.	-174.	44.	120.	-12.	-20
1 1208	222	-----	334.	0.	89.	48.	0.	0
1 1305	279	1.55	334.	-87.	-44.	24.	74.	-20
1 1405	339	1.71	0.	261.	-222.	120.	-37.	7
1 1505	399	1.71	334.	174.	133.	0.	-12.	-13
2 907	1481	-----	1670.	-87.	-44.	0.	12.	0
2 1005	1539	-----	-835.	261.	0.	0.	49.	-47
2 1205	1659	-----	501.	-87.	133.	-24.	25.	0
2 1305	1719	-----	-167.	87.	44.	24.	12.	0

----- NO DATA TAKEN

11 NOV 1981

PAGE 2

T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY	AER.V UM3/CC TSI 023	AER.N PART/CC TSI 023	AER.S UM2/CC TSI 023	CO PPM BK6800-1	THC PFMC BK6800-1
19.8	1.49	2.	1000.	18.		
26.9	3.45	1.	72.	8.		
28.5	4.03	2.	140.	18.		
31.7	3.72	1.	475.	11.		
32.5	3.18	-1.	277.	-4.	1.21	1.62
32.0	2.73	0.	129.	1.	1.41	1.62
31.5	0.74	2.	626.	13.	1.41	1.67
22.8	1.38	2.	1558.	16.		
24.9	3.56	2.	-554.	14.		
31.9	3.79	-1.	541.	-7.		
32.2		0.	1.	4.		

PART.133 PART/CC TSI 023	PART.237 PART/CC TSI 023	PART.422 PART/CC TSI 023	PART.750 PART/CC TSI 023
--------------------------------	--------------------------------	--------------------------------	--------------------------------

96.	-25.	7.	7.
24.	0.	0.	4.
120.	-12.	-20.	14.
48.	0.	0.	4.
24.	74.	-20.	-4.
120.	-37.	7.	0.
0.	-12.	-13.	11.
0.	12.	0.	7.
0.	49.	-47.	18.
-24.	25.	0.	-7.
24.	12.	0.	0.

2

AFF- 3
OZONE CONDITIONING
1980 JUN 13-14

DAY 1 (JUNE 13)

0850: BAG FILLED WITH PURE AIR AT ~50% R.H.

1056: 488 ML. 2.5% OZONE INJECTED INTO BAG.

1251: 5.5 LITERS OZONE INJECTED INTO BAG.

RESULTS: O3 DECAY RATE = 0.29 %/HR

T=0 AT 1056 PST

BAG NO. 14 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	30.1	1.3	DEG C

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
4300	TSI 023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
1790	D-1790	DASIBI 1790 OZONE MONITOR
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479
4400	MRI 388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV. ONE CNC MD:RICH100, SN:143
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038-2

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	T DEG C DORIC-1	CONDENS 10E3/CC CNC-143	BSCA 10-4 MRI 3
1 1035	-21	0.000	0.033	0.004	0.038	28.6	0.3	0.
1 1223	87	0.247	0.053	0.007	0.058	30.7	28.0	0.
1 1302	126	3.398	0.055	0.025	0.075	31.0	43.0	0.
2 1445	1669	3.150	-----	-----	-----	-----	-----	----

----- NO DATA TAKEN

T DEG C DORIC-1	CONDENS 10E3/CC CNC-143	BSCAT 10-4 M-1 MRI 388	AER.V UM3/CC TSI 023	AER.N PART/CC TSI 023	AER.S UM2/CC TSI 023
28.6	0.3	0.2	-0.	829.	5.
30.7	28.7	0.3	1.	2633.	19.
31.0	43.0	0.2	1.	7396.	29.
-----	-----	-----	-----	-----	-----

AFF-- 4

NO OXIDATION (DARK)
1980 JUN 16-17

DAY 1 (JUNE 16)

0700: BAG FILLED WITH PURE AIR AT ~50% R.H.

0810, 0815, 0820, 0825, 0830: 10 CC OF NO (IN N2) WAS INJECTED
AT EACH TIME WITH A TOTAL OF 50 CC PURE NO INJECTED TO
GIVE 1.0 PPM NO.

0852: BAG DIVIDED.

NOTE: BAG COVERED THROUGHOUT EXPERIMENT.

RESULTS:

SIMILAR NO OXIDATION RATES ON BOTH SIDES.

AVG. NO LOSS RATE = 2.0×10^{-4} PPM/MIN

AVG. NO2 FORM. RATE = 1.5×10^{-4} PPM/MIN

T=0 AT 852 PST

BAG NO. 14 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	28.9	6.5	DEG C	SIDE 1
T	DORIC-1	28.5	5.8	DEG C	SIDE 2

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
4300	TSI 023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
1770	D-1790	DASIBI 1790 OZONE MONITOR
4900	B-03-1	BENDIX O3 ANALYZER MD5513340-X SN32787-5
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479
4400	MRI 388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV. ONE CNC MD:RICH100, SN:143
4600	B-NOX-1	BENDIX NOX ANALYZER MDS101BX SN300038-2

AFF- 4
NO OXIDATION (DARK)
1980 JUN 16-17

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 OZONE PPM D-1790	SIDE 1 OZONE PPM D-03-1	SIDE 2 OZONE PPM D-1790	SIDE 2 OZONE PPM D-03-1	SIDE 1 NO PPM D-NOX-1	SIDE 2 NO PPM D-NOX-1	SIDE NO2- PPM D-NO
1 722	-90	0.000	0.001	0.000	0.001	0.018	0.018	0.
1 905	13	0.000	0.001	-----	-----	0.840	-----	0.
1 916	24	-----	-----	0.000	0.001	-----	0.870	-----
1 1005	73	0.000	0.001	-----	-----	0.830	-----	0.
1 1015	83	-----	-----	0.000	0.001	-----	0.850	-----
1 1105	133	0.000	0.001	-----	-----	0.820	-----	0.
1 1115	143	-----	-----	0.000	0.001	-----	0.840	-----
1 1205	193	0.001	0.001	-----	-----	0.820	-----	0.
1 1215	203	-----	-----	0.000	0.003	-----	0.840	-----
1 1305	253	0.002	0.001	-----	-----	0.800	-----	0.
1 1315	263	-----	-----	0.001	0.001	-----	0.820	-----
1 1405	313	0.000	0.002	-----	-----	0.790	-----	0.
1 1415	323	-----	-----	0.001	0.002	-----	0.820	-----
1 1505	373	0.001	0.001	-----	-----	0.780	-----	0.
1 1515	383	-----	-----	0.000	0.002	-----	0.800	-----
2 505	1213	0.000	0.000	-----	-----	0.610	-----	0.
2 515	1223	-----	-----	0.000	0.000	-----	0.630	-----

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 BSCAT 10-4 M-1 MRI 388	SIDE 2 BSCAT 10-4 M-1 MRI 388	SIDE AER UM3 TSI
1 722	-90	22.5	22.5	0.2	0.2	0.4	0.4	-----
1 905	13	25.9	-----	0.5	-----	0.2	-----	-----
1 916	24	-----	26.5	-----	0.2	-----	0.4	-----
1 1005	73	28.8	-----	0.8	-----	0.2	-----	-----
1 1015	83	-----	28.5	-----	0.2	-----	0.2	-----
1 1105	133	30.6	-----	0.5	-----	0.2	-----	-----
1 1115	143	-----	30.5	-----	0.2	-----	0.2	-----
1 1205	193	33.3	-----	0.4	-----	0.1	-----	-----
1 1215	203	-----	32.6	-----	0.2	-----	0.2	-----
1 1305	253	35.2	-----	0.5	-----	0.2	-----	-----
1 1315	263	-----	33.1	-----	0.2	-----	0.2	-----
1 1405	313	35.8	-----	0.5	-----	0.2	-----	-----
1 1415	323	-----	34.0	-----	0.1	-----	0.2	-----
1 1505	373	32.2	-----	0.7	-----	0.2	-----	-----
1 1515	383	-----	32.2	-----	0.2	-----	0.2	-----
2 505	1213	16.1	-----	0.8	-----	0.0	-----	-----
2 515	1223	-----	16.5	-----	0.0	-----	0.1	-----

----- NO DATA TAKEN

	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SIDE 1 NO2-UNC PPM B NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B NOX-1
01	0.018	0.018	0.002	0.002	0.020	0.020
--	0.840	-----	0.060	-----	0.910	-----
01	-----	0.870	-----	0.060	-----	0.940
--	0.830	-----	0.060	-----	0.910	-----
01	-----	0.850	-----	0.070	-----	0.940
--	0.820	-----	0.082	-----	0.920	-----
01	-----	0.840	-----	0.080	-----	0.938
--	0.820	-----	0.090	-----	0.920	-----
03	-----	0.840	-----	0.090	-----	0.940
--	0.800	-----	0.100	-----	0.910	-----
01	-----	0.820	-----	0.100	-----	0.930
--	0.790	-----	0.110	-----	0.910	-----
02	-----	0.820	-----	0.120	-----	0.930
--	0.780	-----	0.120	-----	0.910	-----
02	-----	0.800	-----	0.120	-----	0.940
--	0.610	-----	0.220	-----	0.870	-----
00	-----	0.630	-----	0.240	-----	0.900

	SIDE 1 BSCAT 10-4 M-1 MRI 388	SIDE 2 BSCAT 10-4 M-1 MRI 388	SIDE 1 AER.V UM3/CC TSI 023	SIDE 2 AER.V UM3/CC TSI 023	SIDE 1 AER.N PART/CC TSI 023	SIDE 2 AER.N PART/CC TSI 023
2	0.4	0.4	2.	2.	1035.	1035.
--	0.2	-----	1.	-----	876.	-----
2	-----	0.4	-----	2.	-----	734.
--	0.2	-----	0.	-----	1257.	-----
2	-----	0.2	-----	3.	-----	1099.
--	0.2	-----	1.	-----	890.	-----
2	-----	0.2	-----	-1.	-----	561.
--	0.1	-----	0.	-----	0.	-----
2	-----	0.2	-----	2.	-----	807.
--	0.2	-----	1.	-----	782.	-----
2	-----	0.2	-----	3.	-----	910.
--	0.2	-----	2.	-----	1380.	-----
2	-----	0.2	-----	1.	-----	587.
--	0.2	-----	1.	-----	1344.	-----
2	-----	0.2	-----	1.	-----	838.
--	0.0	-----	1.	-----	1011.	-----
0	-----	0.1	-----	0.	-----	906.

2

AFF- 4
NO OXIDATION (DARK)
1980 JUN 16-17

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 AER.S UM2/CC TSI 023	SIDE 2 AER.S UM2/CC TSI 023
1 722	-90	41.	41.
1 905	13	36.	-----
1 916	24	-----	29.
1 1005	73	29.	-----
1 1015	83	-----	32.
1 1105	133	25.	-----
1 1115	143	-----	1.
1 1205	193	0.	-----
1 1215	203	-----	29.
1 1305	253	24.	-----
1 1315	263	-----	35.
1 1405	313	31.	-----
1 1415	323	-----	19.
1 1505	373	40.	-----
1 1515	383	-----	30.
2 505	1213	29.	-----
2 515	1223	-----	19.

----- NO DATA TAKEN

AFF- 5
PROPENE -- NOX CONDITIONING
1980 JUN 17

0644: BAG FILLED WITH PURE AIR.
0742: 15 ML. NO2 INJECTED AND MIXED.
0745: 25 ML. NO INJECTED AND MIXED.
0754: 40 ML. PROPYLENE INJECTED AND MIXED.
0800: BAG MIXED THOROUGHLY.
0803: BAG DIVIDED.
0833: BAG UNCOVERED (T=0).
0850: R.H.: 60% WET BULB: 16.0 DRY BULB: 21.0

T=0 AT 833 PST

BAG NO. 14 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	28.0	6.8	DEG C	SIDE 1
T	DORIC-1	28.3	6.7	DEG C	SIDE 2
UV RAD	EPPLEY	3.13	0.87	MW/CM2	

ID	INST.	INITIAL CONC.	UNITS	
NO	B-NOX-1	0.665	PPM	SIDE 1
NO	B-NOX-1	0.665	PPM	SIDE 2
NO2-UNC	B-NOX-1	0.430	PPM	SIDE 1
NO2-UNC	B-NOX-1	0.420	PPM	SIDE 2
PROPENE	DMS-1	1.355	PPM	SIDE 1
PROPENE	DMS-1	1.299	PPM	SIDE 2

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
2200	DMS-1	RM-121; DIMETHYLSULFOLANE; FID
2100	PN-1	RM 121; POROPAK N ; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600; FID
4300	TSI 023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4400	MRI 388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV. ONE CNC MD:RICH100, SN:143
1790	D-1790	DASIBI 1790 OZONE MONITOR
4900	B-03-1	BENDIX O3 ANALYZER MD5513340-X SN32787-5
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479
4850	BK6800-1	BECKMAN HYDROCARBON GC MD 6800 SN100015D
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038-2
4350	CLIMET	CLIMET OPC MD:208 SN76-148
4130	EPPLEY	ARB LAB; EPPLEY 11692 UV RADIOMETER
2000	ECD-1	RM-121; 12' 5% CARBOWAX-400 GC; ECD

AFF-- 5
PROPENE - NOX CONDITIONING
1980 JUN 17

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 OZONE PPM D-1790	SIDE 1 OZONE PPM B-03-1	SIDE 2 OZONE PPM D-1790	SIDE 2 OZONE PPM B-03-1	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SID NO2- PP B-NO
1 700	-93	0.000	0.000	0.000	0.000	0.070	0.070	0.
1 807	-26	0.000	0.000	-----	-----	0.365	-----	0.
1 818	-15	-----	-----	-0.001	0.000	-----	0.665	---
1 906	33	0.000	0.000	-----	-----	0.570	-----	0.
1 915	42	-----	-----	0.001	0.000	-----	0.525	---
1 1005	92	0.008	0.016	-----	-----	0.350	-----	0.
1 1015	102	-----	-----	0.014	0.020	-----	0.260	---
1 1105	152	0.057	0.070	-----	-----	0.110	-----	0.
1 1115	162	-----	-----	0.123	0.145	-----	0.006	---
1 1205	212	0.321	0.342	-----	-----	0.030	-----	0.
1 1215	222	-----	-----	0.427	0.420	-----	0.030	---
1 1305	272	0.633	0.640	-----	-----	0.020	-----	0.
1 1315	282	-----	-----	0.716	0.735	-----	0.030	---
1 1405	332	0.825	0.840	-----	-----	0.022	-----	0.
1 1415	342	-----	-----	0.886	0.890	-----	0.030	---
1 1505	392	0.951	0.965	-----	-----	0.022	-----	0.
1 1515	402	-----	-----	0.976	0.980	-----	0.021	---
1 1605	452	0.997	1.000	-----	-----	0.020	-----	0.
1 1615	462	-----	-----	0.996	1.020	-----	0.020	---

----- NO DATA TAKEN

	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1
000	0.070	0.070	0.020	0.020	0.080	0.080
---	0.665	---	0.430	---	1.090	---
000	---	0.665	---	0.420	---	1.080
---	0.570	---	0.510	---	1.080	---
000	---	0.525	---	0.550	---	1.070
---	0.350	---	0.700	---	1.040	---
020	---	0.260	---	0.770	---	1.010
---	0.110	---	0.910	---	0.960	---
145	---	0.006	---	0.930	---	0.920
---	0.030	---	0.860	---	0.820	---
420	---	0.030	---	0.800	---	0.780
---	0.020	---	0.720	---	0.720	---
735	---	0.030	---	0.670	---	0.670
---	0.022	---	0.624	---	0.620	---
890	---	0.030	---	0.585	---	0.590
---	0.022	---	0.560	---	0.560	---
980	---	0.021	---	0.520	---	0.520
---	0.020	---	0.500	---	0.500	---
020	---	0.020	---	0.480	---	0.480

2

AFF- 5
PROPENE - NOX CONDITIONING
1980 JUN 17

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PROPENE PPM DMS-1	SIDE 2 PROPENE PPM DMS-1	SIDE 1 ACETALD PPM 10'C-600	SIDE 2 ACETALD PPM 10'C-600	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	SIDE THC PPM BK680
1 655	-98	0.000	0.000	0.002	0.002	-----	-----	-----
1 700	-93	-----	-----	-----	-----	16.6	16.6	3.5
1 803	-30	1.335	-----	-----	-----	-----	-----	-----
1 807	-26	-----	-----	-----	-----	18.1	-----	7.5
1 815	-18	-----	1.299	-----	-----	-----	-----	-----
1 818	-15	-----	-----	-----	-----	-----	18.3	-----
1 900	27	-----	-----	-----	-----	-----	-----	-----
1 903	30	1.247	-----	-----	-----	-----	-----	-----
1 906	33	-----	-----	-----	-----	21.9	-----	7.2
1 915	42	-----	1.198	-----	-----	-----	23.0	-----
1 1000	87	-----	-----	-----	-----	-----	-----	-----
1 1003	90	1.062	-----	-----	-----	-----	-----	-----
1 1005	92	-----	-----	-----	-----	26.5	-----	7.0
1 1015	102	-----	0.980	-----	-----	-----	28.0	-----
1 1100	147	-----	-----	-----	-----	-----	-----	-----
1 1103	150	0.806	-----	-----	-----	-----	-----	-----
1 1105	152	-----	-----	-----	-----	30.5	-----	6.2
1 1115	162	-----	0.691	-----	-----	-----	31.6	-----
1 1200	207	-----	-----	-----	-----	-----	-----	-----
1 1203	210	0.463	-----	-----	-----	-----	-----	-----
1 1205	212	-----	-----	-----	-----	33.1	-----	5.5
1 1215	222	-----	-----	-----	-----	-----	34.0	-----
1 1218	225	-----	0.299	-----	-----	-----	-----	-----
1 1300	267	-----	-----	-----	-----	-----	-----	-----
1 1303	270	0.155 A	-----	-----	-----	-----	-----	-----
1 1305	272	-----	-----	-----	-----	34.0	-----	4.7
1 1315	282	-----	-----	-----	-----	-----	34.0	-----
1 1317	284	-----	0.088 A	-----	-----	-----	-----	-----
1 1400	327	-----	-----	-----	-----	-----	-----	-----
1 1403	330	0.040 A	-----	-----	-----	-----	-----	-----
1 1405	332	-----	-----	-----	-----	34.5	-----	4.4
1 1415	342	-----	-----	-----	-----	-----	33.8	-----
1 1418	345	-----	0.021 A	-----	-----	-----	-----	-----
1 1500	387	-----	-----	-----	-----	-----	-----	-----
1 1503	390	0.009 A	-----	0.257	-----	-----	-----	-----
1 1505	392	-----	-----	-----	-----	33.0	-----	4.1
1 1515	402	-----	-----	-----	-----	-----	33.1	-----
1 1517	404	-----	0.005 A	-----	0.393	-----	-----	-----
1 1600	447	-----	-----	-----	-----	-----	-----	-----
1 1603	450	0.002 A	-----	-----	-----	-----	-----	-----
1 1605	452	-----	-----	-----	-----	-----	-----	-----
1 1615	462	-----	0.001 A	-----	-----	31.6	-----	4.1
1 1700	507	-----	-----	-----	-----	-----	30.8	-----

----- NO DATA TAKEN

SIDE 2 CETALD PPM 0'C-600	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	SIDE 1 THC PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1	UV RAD MW/CM2 EPPLEY	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143
0.002	-----	-----	-----	-----	-----	-----	-----
	16.6	16.6	3.55	3.55	-----	0.4	0.4
	18.1	-----	7.56	-----	-----	0.2	-----
	-----	18.3	-----	7.47	-----	-----	0.2
	-----	-----	-----	-----	2.02	-----	-----
	21.9	-----	7.38	-----	-----	0.2	-----
	-----	23.0	-----	7.29	-----	-----	0.2
	-----	-----	-----	-----	2.83	-----	-----
	26.5	-----	7.01	-----	-----	0.2	-----
	-----	28.0	-----	6.83	-----	-----	0.2
	-----	-----	-----	-----	2.64	-----	-----
	30.5	-----	6.29	-----	-----	0.2	-----
	-----	31.6	-----	6.10	-----	-----	0.2
	-----	-----	-----	-----	4.53	-----	-----
	33.1	-----	5.56	-----	-----	1.7	-----
	-----	34.0	-----	5.19	-----	-----	3.0
	-----	-----	-----	-----	3.68	-----	-----
	34.0	-----	4.74	-----	-----	3.5	-----
	-----	34.0	-----	4.65	-----	-----	5.5
	-----	-----	-----	-----	3.89	-----	-----
	34.5	-----	4.46	-----	-----	2.2	-----
	-----	33.8	-----	4.37	-----	-----	4.4
	-----	-----	-----	-----	3.43	-----	-----
	33.0	-----	4.19	-----	-----	1.2	-----
	-----	33.1	-----	4.19	-----	-----	2.8
0.393	-----	-----	-----	-----	3.29	-----	-----
	31.6	-----	4.19	-----	-----	0.6	-----
	-----	30.8	-----	4.19	-----	-----	1.9
	-----	-----	-----	-----	1.87	-----	-----

AFF- 5
 PROPENE - NOX CONDITIONING
 1980 JUN 17

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET	SID BSC 10-4 MRI
1 700	-93	0.	0.	0.	0.	0.	0.	0
1 807	-26	0.	-----	0.	-----	0.	-----	0
1 818	-15	-----	0.	-----	0.	-----	0.	---
1 906	33	0.	-----	0.	-----	0.	-----	0
1 915	42	-----	0.	-----	0.	-----	0.	---
1 1005	92	0.	-----	0.	-----	0.	-----	0
1 1015	102	-----	0.	-----	0.	-----	0.	---
1 1105	152	0.	-----	0.	-----	0.	-----	0
1 1115	162	-----	0.	-----	0.	-----	-----	---
1 1205	212	0.	-----	0.	-----	-----	-----	0
1 1215	222	-----	0.	-----	0.	-----	0.	---
1 1305	272	0.	-----	0.	-----	0.	-----	0
1 1315	282	-----	0.	-----	0.	-----	0.	---
1 1405	332	0.	-----	0.	-----	0.	-----	0
1 1415	342	-----	0.	-----	0.	-----	0.	---
1 1505	392	0.	-----	0.	-----	-----	-----	0
1 1515	402	-----	0.	-----	0.	-----	0.	---
1 1605	452	0.	-----	0.	-----	0.	-----	0
1 1615	462	-----	0.	-----	0.	-----	0.	---

----- NO DATA TAKEN

11 NOV 1981

PAGE 4

SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET	SIDE 1 BSCAT 10-4 M-1 MRI 398	SIDE 2 BSCAT 10-4 M-1 MRI 388	SIDE 1 AER.V UM3/CC TSI 023	SIDE 2 AER.V UM3/CC TSI 023
0.	0.	0.2	0.2	-1.	-1.
0.	-----	0.2	-----	1.	-----
-----	0.	-----	0.2	-----	0.
0.	-----	0.2	-----	-0.	-----
-----	0.	-----	0.2	-----	-1.
0.	-----	0.2	-----	2.	-----
-----	0.	-----	0.2	-----	1.
0.	-----	0.2	-----	-2.	-----
-----	-----	-----	0.2	-----	-2.
-----	-----	0.2	-----	1.	-----
-----	0.	-----	0.2	-----	-0.
0.	-----	0.2	-----	2.	-----
-----	0.	-----	0.2	-----	6.
0.	-----	0.2	-----	-0.	-----
-----	0.	-----	0.2	-----	0.
-----	-----	0.2	-----	0.	-----
-----	0.	-----	0.2	-----	0.
0.	-----	0.2	-----	0.	-----
-----	0.	-----	0.2	-----	-1.

2

AFF- 5
PROPENE - NOX CONDITIONING
1980 JUN 17

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 AER.N PART/CC TSI 023	SIDE 2 AER.N PART/CC TSI 023	SIDE 1 AER.S UM2/CC TSI 023	SIDE 2 AER.S UM2/CC TSI 023	SIDE 1 CO PPM BK6800-1	SIDE 2 CO PPM BK6800-1	SIDE PAI PPM ECD
1 700	-93	778.	778.	-3.	-3.	1.23	1.23	----
1 807	-26	634.	-----	5.	-----	1.23	-----	----
1 818	-15	-----	779.	-----	6.	-----	1.23	----
1 906	33	188.	-----	-4.	-----	1.23	-----	----
1 915	42	-----	621.	-----	-5.	-----	1.23	----
1 1005	92	822.	-----	14.	-----	1.23	-----	----
1 1015	102	-----	263.	-----	10.	-----	1.23	----
1 1105	152	95.	-----	-12.	-----	1.23	-----	----
1 1115	162	-----	274.	-----	-17.	-----	1.44	----
1 1205	212	571.	-----	16.	-----	1.44	-----	----
1 1215	222	-----	1168.	-----	2.	-----	1.44	----
1 1305	272	698.	-----	23.	-----	1.64	-----	----
1 1315	282	-----	6958.	-----	61.	-----	1.64	----
1 1405	332	3525.	-----	10.	-----	1.64	-----	----
1 1415	342	-----	5384.	-----	21.	-----	1.85	----
1 1505	392	2840.	-----	12.	-----	1.85	-----	----
1 1515	402	-----	7580.	-----	24.	-----	1.85	----
1 1605	452	743.	-----	9.	-----	2.06	-----	----
1 1615	462	-----	7241.	-----	15.	-----	2.06	0.2

----- NO DATA TAKEN

SIDE 1 CO PPM	SIDE 2 CO PPM	SIDE 1 PAN PPM	SIDE 2 PAN PPM	SIDE 1 PART.024 PART/CC TSI 023	SIDE 2 PART.024 PART/CC TSI 023
BK6800-1	BK6800-1	ECD-1	ECD-1		
1.23	1.23	-----	-----	668.	668.
1.23	-----	-----	-----	668.	-----
-----	1.23	-----	-----	-----	835.
1.23	-----	-----	-----	167.	-----
-----	1.23	-----	-----	-----	668.
1.23	-----	-----	-----	835.	-----
-----	1.23	-----	-----	-----	167.
1.23	-----	-----	-----	167.	-----
-----	1.44	-----	-----	-----	0.
1.44	-----	-----	-----	334.	-----
-----	1.44	-----	-----	-----	835.
1.64	-----	-----	-----	501.	-----
-----	1.64	-----	-----	-----	6513.
1.64	-----	-----	-----	3674.	-----
-----	1.85	-----	-----	-----	4008.
1.85	-----	-----	-----	1670.	-----
-----	1.85	-----	-----	-----	6179.
2.06	-----	-----	0.230	501.	-----
-----	2.06	0.230	-----	-----	6179.

2

AFF- 5
PROPENE - NOX CONDITIONING
1980 JUN 17

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.042 PART/CC TSI 023	SIDE 2 PART.042 PART/CC TSI 023	SIDE 1 PART.075 PART/CC TSI 023	SIDE 2 PART.075 PART/CC TSI 023	SIDE 1 PART.133 PART/CC TSI 023	SIDE 2 PART.133 PART/CC TSI 023	SID PART PART TSI
1 700	-93	0.	0.	44.	44.	48.	48.	2
1 807	-26	-174.	-----	89.	-----	96.	-----	-4
1 818	-15	-----	-87.	-----	0.	-----	24.	---
1 906	33	-87.	-----	133.	-----	-24.	-----	1
1 915	42	-----	-174.	-----	89.	-----	48.	---
1 1005	92	0.	-----	-44.	-----	24.	-----	
1 1015	102	-----	0.	-----	44.	-----	48.	---
1 1105	152	-174.	-----	133.	-----	-24.	-----	
1 1115	162	-----	174.	-----	178.	-----	-24.	---
1 1205	212	87.	-----	89.	-----	48.	-----	1
1 1215	222	-----	348.	-----	-44.	-----	24.	---
1 1305	272	0.	-----	222.	-----	-48.	-----	1
1 1315	282	-----	261.	-----	133.	-----	24.	---
1 1405	332	-522.	-----	355.	-----	0.	-----	2
1 1415	342	-----	1044.	-----	355.	-----	-48.	---
1 1505	392	1131.	-----	44.	-----	0.	-----	-1
1 1515	402	-----	957.	-----	444.	-----	0.	---
1 1605	452	87.	-----	89.	-----	72.	-----	-1
1 1615	462	-----	609.	-----	444.	-----	0.	---

----- NO DATA TAKEN

11 NOV 1981

PAGE 6

2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
075	PART.133	PART.133	PART.237	PART.237	PART.422	PART.422
CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
23	TSI 023	TSI 023	TSI 023	TSI 023	TSI 023	TSI 023
.	48.	48.	25.	25.	0.	0.
--	96.	-----	-49.	-----	0.	-----
.	-----	24.	-----	0.	-----	7.
--	-24.	-----	12.	-----	-13.	-----
.	-----	48.	-----	0.	-----	-7.
--	24.	-----	0.	-----	0.	-----
.	-----	48.	-----	0.	-----	0.
--	-24.	-----	0.	-----	0.	-----
.	-----	-24.	-----	-37.	-----	-13.
--	48.	-----	12.	-----	-7.	-----
.	-----	24.	-----	12.	-----	-7.
--	-48.	-----	12.	-----	0.	-----
.	-----	24.	-----	12.	-----	-13.
--	0.	-----	25.	-----	-7.	-----
.	-----	-48.	-----	25.	-----	0.
--	0.	-----	-12.	-----	7.	-----
.	-----	0.	-----	0.	-----	0.
--	72.	-----	-12.	-----	7.	-----
.	-----	0.	-----	0.	-----	20.

2

AFF- 5
PROPENE - NOX CONDITIONING
1980 JUN 17

CLOCK		ELAPSED	SIDE 1	SIDE 2
TIME		TIME	PART.750	PART.750
DAY	HR.	(MIN)	PART/CC	PART/CC
			TSI 023	TSI 023
1	700	-93	-7.	-7.
1	807	-26	4.	-----
1	818	-15	-----	0.
1	906	33	0.	-----
1	915	42	-----	-4.
1	1005	92	7.	-----
1	1015	102	-----	4.
1	1105	152	-7.	-----
1	1115	162	-----	-4.
1	1205	212	7.	-----
1	1215	222	-----	0.
1	1305	272	11.	-----
1	1315	282	-----	28.
1	1405	332	0.	-----
1	1415	342	-----	0.
1	1505	392	0.	-----
1	1515	402	-----	0.
1	1605	452	0.	-----
1	1615	462	-----	-11.

----- NO DATA TAKEN

17
NOTES

A INSTRUMENT MALFUNCTION CHANGED RETENTION TIME. CALIB FACTOR ESTIMATED.
B FAN DETERMINED TO BE ABOUT 230 PPB ON EACH SIDE BY
B MEASURING DILUTED SAMPLER ON FANALYZER AND MULTIPLYING
B BY DILUTION.

AFF- 6
OZONE CONDITIONING
1980 JUNE 18-19

DAY 1 (JUNE 18)

0710: BAG FILLED WITH PURE AIR.
0810: 448 ML. 3% OZONE FLUSHED INTO BAG.
0815: BAG MIXED AND DIVIDED.
NOTE: BAG COVERED THROUGHOUT EXPERIMENT.

RESULTS		DAY 1	OVERNIGHT
-----		-----	-----
OZONE DECAY RATE	SIDE A	0.43	0.48
(%/HR)	SIDE B	0.76	0.66

T=0 AT 810 PST

BAG NO. 14 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	25.0	5.9	DEG C	SIDE 1
T	DORIC-1	26.5	4.9	DEG C	SIDE 2

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
4300	TSI 023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4400	MRI 388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV. ONE CNC MD:RICH100, SN:143
1790	D-1790	DASIBI 1790 OZONE MONITOR
4900	B-03-1	BENDIX O3 ANALYZER MD5513340-X SN32787-5
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038 2

AFF- 6
OZONE CONDITIONING
1980 JUNE 18-19

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 OZONE PPM B-03-1	SIDE 1 OZONE PPM D-1790	SIDE 2 OZONE PPM B-03-1	SIDE 2 OZONE PPM D-1790	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SIDE NO2-U PPM B-NOX
1 735	-35	0.010	0.004	-----	-----	0.000	-----	0.0
1 755	-15	0.008	0.004	-----	-----	0.000	-----	0.0
1 820	10	0.264	0.274	-----	-----	0.000	-----	0.0
1 825	15	-----	-----	0.271	0.277	-----	0.000	-----
1 905	55	0.261	0.278	-----	-----	0.000	-----	0.0
1 915	65	-----	-----	0.264	0.277	-----	0.000	-----
1 1005	115	0.262	0.272	-----	-----	0.005	-----	0.0
1 1015	125	-----	-----	0.261	0.277	-----	0.004	-----
1 1105	175	0.261	0.274	-----	-----	0.006	-----	0.0
1 1115	185	-----	-----	0.260	0.272	-----	0.003	-----
1 1205	235	0.260	0.271	-----	-----	0.006	-----	0.0
1 1215	245	-----	-----	0.260	0.271	-----	0.003	-----
1 1305	295	0.259	0.270	-----	-----	0.001	-----	0.0
1 1315	305	-----	-----	0.259	0.268	-----	0.003	-----
1 1405	355	0.258	0.267	-----	-----	0.002	-----	0.0
1 1415	365	-----	-----	0.257	0.266	-----	0.002	-----
1 1505	415	0.260	0.266	-----	-----	0.002	-----	0.0
1 1515	425	-----	-----	0.260	0.263	-----	0.002	-----
2 503	1253	-----	0.249	-----	-----	-----	-----	-----
2 509	1259	-----	-----	-----	0.240	-----	-----	-----

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 BSCAT 10-4 M-1 MRI 388	SIDE 2 BSCAT 10-4 M-1 MRI 388	SIDE AER. UM3/ TSI C
1 735	-35	17.5	-----	0.1	-----	0.2	-----	2
1 755	-15	18.0	-----	0.3	-----	0.2	-----	1
1 820	10	18.9	-----	0.4	-----	0.2	-----	-0
1 825	15	-----	18.6	-----	0.5	-----	0.3	-----
1 905	55	21.0	-----	0.9	-----	0.2	-----	3
1 915	65	-----	20.7	-----	0.3	-----	0.3	-----
1 1005	115	23.5	-----	0.7	-----	0.2	-----	2
1 1015	125	-----	24.0	-----	-----	-----	0.0	-----
1 1105	175	26.9	-----	-----	-----	0.2	-----	2
1 1115	185	-----	26.5	-----	-----	-----	0.2	-----
1 1205	235	29.7	-----	-----	-----	0.2	-----	-9
1 1215	245	-----	29.3	-----	-----	-----	0.2	-----
1 1305	295	30.9	-----	-----	-----	0.2	-----	0
1 1315	305	-----	30.2	-----	-----	-----	0.2	-----
1 1405	355	31.8	-----	-----	-----	0.2	-----	-0
1 1415	365	-----	31.3	-----	-----	-----	0.3	-----
1 1505	415	31.8	-----	0.7	-----	0.2	-----	1
1 1515	425	-----	31.1	-----	0.2	-----	0.3	-----

----- NO DATA TAKEN

IDE 2 ZONE PM	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1
1790	0.000	-----	0.008	-----	0.000	-----
-----	0.000	-----	0.010	-----	0.000	-----
-----	0.000	-----	0.011	-----	0.000	-----
0.277	-----	0.000	-----	0.014	-----	0.000
-----	0.000	-----	0.013	-----	0.001	-----
0.277	-----	0.000	-----	0.014	-----	0.000
-----	0.005	-----	0.020	-----	0.020	-----
0.277	-----	0.004	-----	0.014	-----	0.019
-----	0.006	-----	0.016	-----	0.021	-----
0.272	-----	0.003	-----	0.015	-----	0.020
-----	0.006	-----	0.015	-----	0.020	-----
0.271	-----	0.003	-----	0.012	-----	0.020
-----	0.001	-----	0.015	-----	0.019	-----
0.268	-----	0.003	-----	0.013	-----	0.019
-----	0.002	-----	0.013	-----	0.019	-----
0.266	-----	0.002	-----	0.013	-----	0.018
-----	0.002	-----	0.014	-----	0.017	-----
0.263	-----	0.002	-----	0.012	-----	0.015
-----	-----	-----	-----	-----	-----	-----
0.240	-----	-----	-----	-----	-----	-----

IDE 2 NDENS E3/CC C-143	SIDE 1 BSCAT 10-4 M-1 MRI 388	SIDE 2 BSCAT 10-4 M-1 MRI 388	SIDE 1 AER.V UM3/CC TSI 023	SIDE 2 AER.V UM3/CC TSI 023	SIDE 1 AER.N PART/CC TSI 023	SIDE 2 AER.N PART/CC TSI 023
-----	0.2	-----	2.	-----	478.	-----
-----	0.2	-----	1.	-----	980.	-----
-----	0.2	-----	-0.	-----	597.	-----
0.5	-----	0.3	-----	0.	-----	519.
-----	0.2	-----	3.	-----	1750.	-----
0.3	-----	0.3	-----	0.	-----	1431.
-----	0.2	-----	2.	-----	1096.	-----
-----	-----	0.0	-----	2.	-----	1083.
-----	0.2	-----	2.	-----	982.	-----
-----	-----	0.2	-----	1.	-----	720.
-----	0.2	-----	-9.	-----	378.	-----
-----	-----	0.2	-----	0.	-----	476.
-----	0.2	-----	0.	-----	845.	-----
-----	-----	0.2	-----	1.	-----	482.
-----	0.2	-----	-0.	-----	777.	-----
-----	-----	0.3	-----	1.	-----	546.
-----	0.2	-----	1.	-----	266.	-----
0.2	-----	0.3	-----	1.	-----	946.

2

AFF- 6
OZONE CONDITIONING
1980 JUNE 18-19

CLOCK		ELAPSED	SIDE 1	SIDE 2
TIME		TIME	AER.S	AER.S
DAY	HR.	(MIN)	UM2/CC	UM2/CC
			TSI 023	TSI 023
1	735	-35	26.	-----
1	755	-15	23.	-----
1	820	10	15.	-----
1	825	15	-----	11.
1	905	55	40.	-----
1	915	65	-----	13.
1	1005	115	33.	-----
1	1015	125	-----	36.
1	1105	175	38.	-----
1	1115	185	-----	24.
1	1205	235	-52.	-----
1	1215	245	-----	9.
1	1305	295	11.	-----
1	1315	305	-----	14.
1	1405	355	7.	-----
1	1415	365	-----	23.
1	1505	415	25.	-----
1	1515	425	-----	21.

----- NO DATA TAKEN

AFF- 7
ALKENE - NOX CONDITIONING
1980 JUN 19

0650: BAG FILLED WITH PURE AIR.
0700: R.H.: 86.0 WET BU'D: 17.5 DRY BULB: 19.0
0743: 15 ML. NO2 INJECTED, MIXED.
0747: 25 ML. NO INJECTED.
0805: 40 ML. CIS-2-BUTENE INJECTED.
0808: MIXED BAG.
0814: DIVIDED BAG.
0845: UNCOVER BAG (T=0).

T=0 AT 845 PST

BAG NO. 14 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	27.9	7.1	DEG C	SIDE 1
T	DORIC-1	28.6	6.7	DEG C	SIDE 2
UV RAD	EPPLEY	3.46	0.56	MW/CM2	

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
2100	PN-1	RM 121; POROPAK N ; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600; FID
4300	TSI 023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4400	MRI 388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV. ONE CNC MD:RICH100, SN:143
4900	B-03-1	BENDIX 03 ANALYZER MD5513340-X SN32787-5
4850	BK6800-1	BECKMAN HYDROCARBON GC MD 6800 SN100015D
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038-2
4350	CLIMET	CLIMET OPC MD:208 SN76-148
4130	EPPLEY	ARB LAB; EPPLEY 11692 UV RADIOMETER
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600; ECD

AFF- 7
 ALKENE - NOX CONDITIONING
 1990 JUN 19

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 OZONE PPM D-1790	SIDE 1 OZONE PPM B-03-1	SIDE 2 OZONE PPM D-1790	SIDE 2 OZONE PPM B-03-1	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SIDE NO2-UI PPM B-NOX-
1 715	-90	0.004	0.005	0.004	0.005	0.010	0.010	0.00
1 820	-25	-0.002	0.001	-----	-----	0.600	-----	0.38
1 835	-10	-----	-----	-0.003	0.001	-----	0.600	-----
1 905	20	0.067	0.090	-----	-----	0.055	-----	0.92
1 915	30	-----	-----	0.357	0.390	-----	0.035	-----
1 1005	50	0.529	0.590	-----	-----	0.035	-----	0.78
1 1015	90	-----	-----	0.587	0.650	-----	0.040	-----
1 1105	140	0.701	0.835	-----	-----	0.030	-----	0.70
1 1115	150	-----	-----	0.791	0.945	-----	0.030	-----
1 1205	200	0.934	-----	-----	-----	0.030	-----	0.62
1 1215	210	-----	-----	1.035	1.000	-----	0.035	-----

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 CIS2-C4= PPM DMS-1	SIDE 2 CIS2-C4= PPM DMS-1	SIDE 1 PAN PPM ECD-3	SIDE 2 PAN PPM ECD-3	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	SIDE THC PPM BK6800
1 700	-105	-----	-----	-----	-----	-----	-----	-----
1 715	-90	-----	-----	-----	-----	19.0	19.0	3.28
1 730	-75	-----	-----	-----	-----	-----	-----	-----
1 800	-45	-----	-----	-----	-----	-----	-----	-----
1 820	-25	-----	-----	0.000	-----	21.8	-----	9.11
1 830	-15	-----	-----	-----	-----	-----	-----	-----
1 835	-10	-----	-----	-----	0.000	-----	23.8	-----
1 900	15	-----	-----	-----	-----	-----	-----	-----
1 905	20	-----	-----	0.003	-----	25.6	-----	7.75
1 915	30	-----	-----	-----	0.015	-----	26.4	-----
1 920	35	0.0047	-----	-----	-----	-----	-----	-----
1 930	45	-----	0.0046	-----	-----	-----	-----	-----
1 1000	75	-----	-----	-----	-----	-----	-----	-----
1 1002	77	0.0033	-----	-----	-----	-----	-----	-----
1 1005	80	-----	-----	0.016	-----	29.9	-----	5.42
1 1015	90	-----	0.0009	-----	0.016	-----	31.7	-----
1 1030	105	-----	-----	-----	-----	-----	-----	-----
1 1100	135	-----	-----	-----	-----	-----	-----	-----
1 1103	138	0.0002	-----	-----	-----	-----	-----	-----
1 1105	140	-----	-----	0.016	-----	33.5	-----	5.61
1 1115	150	-----	-----	-----	-----	-----	34.5	-----
1 1130	165	-----	-----	-----	-----	-----	-----	-----
1 1200	195	-----	-----	-----	-----	-----	-----	-----
1 1205	200	-----	-----	0.015	-----	37.5	-----	5.19
1 1215	210	-----	-----	-----	0.015	-----	36.3	-----
1 1230	225	-----	-----	-----	-----	-----	-----	-----
1 1300	255	-----	-----	-----	-----	-----	-----	-----

----- NO DATA TAKEN

11 NOV 1981

PAGE 2

SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1
0.010	0.010	0.003	0.003	0.015	0.015
0.600	-----	0.385	-----	0.990	-----
-----	0.600	-----	0.385	-----	0.990
0.055	-----	0.920	-----	0.950	-----
-----	0.035	-----	0.840	-----	0.860
0.035	-----	0.780	-----	0.790	-----
-----	0.040	-----	0.765	-----	0.780
0.030	-----	0.700	-----	0.700	-----
-----	0.030	-----	0.700	-----	0.700
0.030	-----	0.670	-----	0.675	-----
-----	0.035	-----	0.640	-----	0.650

SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	SIDE 1 THC PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1	UV RAD MW/CM2 EPPLEY	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET
-----	-----	-----	-----	-----	-----	-----
19.0	19.0	3.28	3.28	-----	1.	1.
-----	-----	-----	-----	-----	-----	-----
21.8	-----	9.11	-----	-----	1.	-----
-----	23.8	-----	8.93	2.93	-----	1.
-----	-----	-----	-----	2.51	-----	-----
25.6	-----	7.75	-----	-----	1.	-----
-----	26.4	-----	6.29	-----	-----	1.
-----	-----	-----	-----	3.05	-----	-----
-----	-----	-----	-----	2.97	-----	-----
-----	-----	-----	-----	-----	1.	-----
29.9	-----	5.47	-----	-----	-----	0.
-----	31.7	-----	5.47	3.54	-----	-----
-----	-----	-----	-----	3.91	-----	-----
-----	-----	-----	-----	-----	0.	-----
33.5	-----	5.65	-----	-----	-----	0.
-----	34.5	-----	5.56	4.05	-----	-----
-----	-----	-----	-----	3.58	-----	-----
37.5	-----	5.19	-----	-----	0.	-----
-----	36.3	-----	5.38	3.99	-----	0.
-----	-----	-----	-----	4.04	-----	-----

2

AFF- 7
 ALKENE - NOX CONDITIONING
 1980 JUN 19

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET	SIDE 1 BSCAT 10-4 M-1 MRI 388	SIDE 2 BSCAT 10-4 M-1 MRI 388	SIDE 1 AER UM2 TSI
1 715	-90	0.	0.	0.	0.	0.2	0.2	
1 820	-25	0.	-----	0.	-----	0.2	-----	
1 835	-10	-----	0.	-----	0.	-----	0.2	---
1 905	20	0.	-----	0.	-----	0.2	-----	
1 915	30	-----	0.	-----	0.	-----	0.2	---
1 1005	80	0.	-----	0.	-----	0.2	-----	
1 1015	90	-----	0.	-----	0.	-----	0.2	---
1 1105	140	0.	-----	0.	-----	0.2	-----	
1 1115	150	-----	0.	-----	0.	-----	0.2	---
1 1205	200	0.	-----	0.	-----	0.2	-----	
1 1215	210	-----	0.	-----	0.	-----	0.2	---

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 AER.S UM2/CC TSI 023	SIDE 2 AER.S UM2/CC TSI 023	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 CO PPM BK6800-1	SIDE 2 CO PPM BK6800-1	SIDE 1 PAR1 PAR1 TSI
1 715	-90	26.	26.	0.2	0.2	2.06	2.06	100
1 820	-25	-0.	-----	0.2	-----	2.26	-----	60
1 835	-10	-----	5.	-----	0.2	-----	2.26	---
1 905	20	14.	-----	0.2	-----	2.26	-----	30
1 915	30	-----	8.	-----	8.0	-----	2.26	---
1 1005	80	47.	-----	13.0	-----	2.47	-----	1.1
1 1015	90	-----	20.	-----	13.6	-----	2.47	---
1 1105	140	76.	-----	12.6	-----	2.47	-----	885
1 1115	150	-----	81.	-----	8.5	-----	2.47	---
1 1205	200	75.	-----	4.8	-----	2.47	-----	818
1 1215	210	-----	89.	-----	5.4	-----	2.67	---

----- NO DATA TAKEN

	SIDE 1 BSCAT 10-4 M-1 MRI 388	SIDE 2 BSCAT 10-4 M-1 MRI 388	SIDE 1 AER.V UM3/CC TSI 023	SIDE 2 AER.V UM3/CC TSI 023	SIDE 1 AER.N PART/CC TSI 023	SIDE 2 AER.N PART/CC TSI 023
0.	0.2	0.2	3.	3.	1532.	1532.
---	0.2	-----	-1.	-----	892.	-----
0.	-----	0.2	-----	0.	-----	553.
---	0.2	-----	1.	-----	661.	-----
0.	-----	0.2	-----	-0.	-----	1403.
---	0.2	-----	3.	-----	1.1E 04	-----
0.	-----	0.2	-----	-1.	-----	1.1E 04
---	0.2	-----	4.	-----	8527.	-----
0.	-----	0.2	-----	3.	-----	1.2E 04
---	0.2	-----	4.	-----	7748.	-----
0.	-----	0.2	-----	5.	-----	1.0E 04

	SIDE 1 CO PPM BK6800-1	SIDE 2 CO PPM BK6800-1	SIDE 1 PART.024 PART/CC TSI 023	SIDE 2 PART.024 PART/CC TSI 023	SIDE 1 PART.042 PART/CC TSI 023	SIDE 2 PART.042 PART/CC TSI 023
0.2	2.06	2.06	1002.	1002.	348.	348.
---	2.26	-----	668.	-----	174.	-----
0.2	-----	2.26	-----	334.	-----	174.
---	2.26	-----	334.	-----	174.	-----
0.	-----	2.26	-----	1169.	-----	87.
---	2.47	-----	1.1E 04	-----	174.	-----
0.6	-----	2.47	-----	1.1E 04	-----	696.
---	2.47	-----	8851.	-----	261.	-----
0.5	-----	2.47	-----	1.2E 04	-----	87.
---	2.47	-----	8183.	-----	-87.	-----
0.4	-----	2.67	-----	1.0E 04	-----	609.

2

AFF- 7
 ALKENE - NOX CONDITIONING
 1980 JUN 19

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.075 PART/CC TSI 023	SIDE 2 PART.075 PART/CC TSI 023	SIDE 1 PART.133 PART/CC TSI 023	SIDE 2 PART.133 PART/CC TSI 023	SIDE 1 PART.237 PART/CC TSI 023	SIDE 2 PART.237 PART/CC TSI 023	SIDE PART. PART/ TSI 0
1 715	-90	133.	133.	48.	48.	0.	0.	-13
1 820	-25	89.	-----	-72.	-----	37.	-----	0
1 835	-10	-----	44.	-----	-24.	-----	25.	-----
1 905	20	89.	-----	48.	-----	12.	-----	0
1 915	30	-----	89.	-----	48.	-----	0.	-----
1 1005	80	311.	-----	24.	-----	-49.	-----	20
1 1015	90	-----	89.	-----	48.	-----	-12.	-----
1 1105	140	89.	-----	-1398.	-----	713.	-----	7
1 1115	150	-----	44.	-----	-1832.	-----	935.	-----
1 1205	200	266.	-----	-1301.	-----	676.	-----	7
1 1215	210	-----	222.	-----	-1735.	-----	898.	-----

----- NO DATA TAKEN

11 NOV 1981

PAGE 4

	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
	PART.237	PART.237	PART.422	PART.422	PART.750	PART.750
	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
	TSI 023	TSI 023	TSI 023	TSI 023	TSI 023	TSI 023
	0.	0.	-13.	-13.	14.	14.
	37.	-----	0.	-----	-4.	-----
	-----	25.	-----	0.	-----	0.
	12.	-----	0.	-----	4.	-----
	-----	0.	-----	13.	-----	-4.
	-49.	-----	20.	-----	11.	-----
	-----	-12.	-----	13.	-----	-7.
	713.	-----	7.	-----	4.	-----
	-----	935.	-----	13.	-----	-7.
	676.	-----	7.	-----	4.	-----
	-----	898.	-----	-7.	-----	4.

2

AFF- 8
JP-4 SHALE VS N-BUTANE
1980 JUN 20

0620: BAG FILLED WITH PURE AIR AT ~50% R.H.
0808: 4.75 ML NO2 INJECTED
0811: 15.75 ML NO INJECTED
0815: BAG DIVIDED
0832: 125 ML N-BUTANE ADDED TO SIDE 1
0810-0834: 370 MICROLITERS JP-4 SHALE ADDED TO SIDE 2
0900: UNCOVERED BAG (T=0).
1135: SIDE A: WET BULB: 21.5, DRY BULB: 33.0, R.H.: 36%
SIDE B: WET BULB: 21.5, DRY BULB: 33.5, R.H.: 34%

PROBLEM:

N-BUTANE OBSERVED TO BUILD UP ON JP-4 SIDE
OF BAG. THEREFORE, RUN IS PROBABLY NOT VALID,
AND WAS REPEATED. (SEE AFF-19)

T=0 AT 900 PST

BAG NO. 14 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	32.2	6.4	DEG C	SIDE 1
T	DORIC-1	31.8	5.8	DEG C	SIDE 2
UV RAD	EPPLEY-1	2.85	0.80	MW/CM2	

ID	INST.	INITIAL CONC.	UNITS	
NO	B-NOX-1	0.295	PPM	SIDE 1
NO	B-NOX-1	0.295	PPM	SIDE 2
NO2-UNC	B-NOX-1	0.120	PPM	SIDE 1
NO2-UNC	B-NOX-1	0.120	PPM	SIDE 2
THC	BK6800-1	43.74	PPMC	SIDE 1
THC	BK6800-1	32.81	PPMC	SIDE 2
N-C4	DMS-1	7.0000	PPM	SIDE 1

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
1790	D-1790	DASIBI 1790 OZONE MONITOR
4900	B-03-1	BENDIX O3 ANALYZER MD5513340-X SN32787-5
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
2750	SE-52C-2	RM-121; 30M SE-52 QUARTZ CAP. GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
4130	EPPLEY-1	ARB LAB; EPPLEY 11692 UV RADIOMETER
4000	ECD-3	AF-LAB; 12" 5% CARBOWAX-600 GC; ECD
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148

AFF- 8
JP-4 SHALE VS N-BUTANE
1980 JUN 20

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 OZONE PPM D-1790	SIDE 1 OZONE PPM B-03-1	SIDE 2 OZONE PPM D-1790	SIDE 2 OZONE PPM B-03-1	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SIDE NO2-L PPM B-NO2
1 640	-140	0.001	0.000	-0.007	0.000	0.010	0.010	0.0
1 837	-23	0.000	-0.002	-----	-----	0.295	-----	0.1
1 845	-15	-----	-----	0.000	0.002	-----	0.228	-----
1 905	5	-0.001	0.000	-----	-----	0.278	-----	0.1
1 915	15	-----	-----	-0.001	0.001	-----	0.267	-----
1 1005	65	0.003	0.007	-----	-----	0.200	-----	0.1
1 1015	75	-----	-----	0.003	0.012	-----	0.181	-----
1 1105	125	0.008	0.015	-----	-----	0.156	-----	0.2
1 1115	135	-----	-----	0.021	0.035	-----	0.090	-----
1 1205	185	0.020	0.027	-----	-----	0.112	-----	0.2
1 1215	195	-----	-----	0.096	0.112	-----	0.032	-----
1 1305	245	0.037	0.042	-----	-----	0.072	-----	0.3
1 1315	255	-----	-----	0.265	0.282	-----	0.017	-----
1 1405	305	0.068	0.077	-----	-----	0.043	-----	0.3
1 1415	315	-----	-----	0.470	0.499	-----	0.015	-----
1 1505	365	0.101	0.117	-----	-----	0.029	-----	0.3
1 1515	375	-----	-----	0.621	-----	-----	0.015	-----
1 1605	425	0.127	-----	-----	-----	0.022	-----	0.3
1 1615	435	-----	-----	0.662	-----	-----	0.016	-----
1 1637	457	-----	-----	-----	-----	-----	0.018 A	-----
1 1640	460	-----	-----	-----	-----	-----	0.018 A	-----
1 1644	464	-----	-----	-----	-----	-----	0.018 B	-----
1 1648	468	-----	-----	-----	-----	-----	0.018 B	-----

----- NO DATA TAKEN

2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
NE	NO	NO	NO2-UNC	NO2-UNC	NOX-UNC	NOX-UNC
M	PPM	PPM	PPM	PPM	PPM	PPM
3-1	B-NOX-1	B-NOX-1	B-NOX-1	B-NOX-1	B-NOX-1	B-NOX-1
000	0.010	0.010	0.010	0.010	0.020	0.020
---	0.295	-----	0.120	-----	0.425	-----
002	-----	0.228	-----	0.118	-----	0.352
---	0.278	-----	0.131	-----	0.424	-----
001	-----	0.267	-----	0.131	-----	0.412
---	0.200	-----	0.198	-----	0.417	-----
012	-----	0.181	-----	0.202	-----	0.398
---	0.156	-----	0.245	-----	0.412	-----
035	-----	0.090	-----	0.280	-----	0.375
---	0.112	-----	0.288	-----	0.405	-----
112	-----	0.032	-----	0.318	-----	0.342
---	0.072	-----	0.325	-----	0.397	-----
282	-----	0.017	-----	0.292	-----	0.302
---	0.043	-----	0.355	-----	0.397	-----
499	-----	0.015	-----	0.234	-----	0.242
---	0.029	-----	0.362	-----	0.382	-----
---	-----	0.015	-----	0.175	-----	0.182
---	0.022	-----	0.366	-----	0.379	-----
---	-----	0.016	-----	0.131	-----	0.142
---	-----	0.018 A	-----	0.115 A	-----	0.128 A
---	-----	0.018 A	-----	0.112 A	-----	0.127 A
---	-----	0.018 B	-----	0.105 B	-----	0.115 B
---	-----	0.018 B	-----	0.103 B	-----	0.113 B

AFF- 8
JP-4 SHALE VS N-BUTANE
1980 JUN 20

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 THC PPMC BK680(-1)	SIDE 2 THC PPMC BK6800-1	SIDE 1 N-C4 PPM DMS-1	SIDE 2 N-C4 PPM DMS-1	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	UV R MW/C EPPL
1 600	-180	-----	-----	-----	-----	-----	-----	-----
1 630	-150	-----	-----	0.0028	-----	-----	-----	-----
1 640	-140	3.28	3.28	-----	-----	19.7	19.7	-----
1 700	-120	-----	-----	-----	-----	-----	-----	-----
1 800	-60	-----	-----	-----	-----	-----	-----	-----
1 835	-25	-----	-----	7.000	-----	-----	-----	-----
1 837	-23	35.54	-----	-----	-----	25.2	-----	-----
1 845	-15	-----	30.07	-----	0.0819 D	-----	25.9	-----
1 900	0	-----	-----	-----	-----	-----	-----	2.6
1 903	3	-----	-----	7.113	-----	-----	-----	-----
1 905	5	43.74	-----	-----	-----	26.3	-----	-----
1 915	15	-----	32.81	-----	-----	-----	27.3	-----
1 917	17	-----	-----	-----	0.1281	-----	-----	-----
1 1000	60	-----	-----	-----	-----	-----	-----	2.5
1 1003	63	-----	-----	6.966	-----	-----	-----	-----
1 1005	65	38.27	-----	-----	-----	31.8	-----	-----
1 1015	75	-----	32.81	-----	-----	-----	32.3	-----
1 1016	76	-----	-----	-----	0.2007	-----	-----	-----
1 1100	120	-----	-----	-----	-----	-----	-----	3.3
1 1103	123	-----	-----	6.879	-----	-----	-----	-----
1 1105	125	39.19	-----	-----	-----	38.5	-----	-----
1 1115	135	-----	32.81	-----	-----	-----	34.6	-----
1 1116	136	-----	-----	-----	0.2648	-----	-----	-----
1 1200	180	-----	-----	-----	-----	-----	-----	4.0
1 1203	183	-----	-----	6.905	-----	-----	-----	-----
1 1205	185	39.19	-----	-----	-----	36.5	-----	-----
1 1215	195	-----	32.81	-----	-----	-----	37.0	-----
1 1217	197	-----	-----	-----	0.3375	-----	-----	-----
1 1300	240	-----	-----	-----	-----	-----	-----	3.4
1 1303	243	-----	-----	6.896	-----	-----	-----	-----
1 1305	245	39.19	-----	-----	-----	37.4	-----	-----
1 1315	255	-----	-----	-----	-----	-----	37.4	-----
1 1400	300	-----	-----	-----	-----	-----	-----	3.0
1 1403	303	-----	-----	6.663	-----	-----	-----	-----
1 1405	305	40.10	-----	-----	-----	36.6	-----	-----
1 1415	315	-----	32.81	-----	-----	-----	36.0	-----
1 1417	317	-----	-----	-----	0.5096	-----	-----	-----
1 1500	360	-----	-----	-----	-----	-----	-----	3.0
1 1503	363	-----	-----	6.715	-----	-----	-----	-----
1 1505	365	40.10	-----	-----	-----	36.4	-----	-----
1 1515	375	-----	31.90	-----	-----	-----	35.2	-----
1 1518	378	-----	-----	-----	0.7234	-----	-----	-----
1 1600	420	-----	-----	-----	-----	-----	-----	1.0
1 1605	425	40.10 C	-----	-----	-----	34.0	-----	-----
1 1608	428	-----	-----	6.862	-----	-----	-----	-----
1 1615	435	-----	32.81 C	-----	-----	-----	32.7	-----
1 1640	460	-----	-----	-----	0.8099	-----	-----	-----
1 1700	480	-----	-----	-----	-----	-----	-----	2.0

----- NO DATA TAKEN

SIDE 2 N-C4 PPM MS-1	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-1	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET
-----	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----	-----
-----	19.7	19.7	-----	0.	0.	0.	0.
-----	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----	-----
-----	25.2	-----	-----	-----	-----	-----	-----
0.0819 D	-----	25.9	-----	-----	-----	-----	-----
-----	-----	-----	2.66	-----	-----	-----	-----
-----	26.3	-----	-----	0.	-----	0.	-----
-----	-----	27.3	-----	-----	0.	-----	0.
0.1281	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	2.53	-----	-----	-----	-----
-----	31.8	-----	-----	0.	-----	0.	-----
-----	-----	32.3	-----	-----	0.	-----	0.
0.2007	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	3.34	-----	-----	-----	-----
-----	38.5	-----	-----	0.	-----	0.	-----
-----	-----	34.6	-----	-----	0.	-----	0.
0.2648	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	4.05	-----	-----	-----	-----
-----	36.5	-----	-----	0.	-----	0.	-----
-----	-----	37.0	-----	-----	0.	-----	0.
0.3375	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	3.45	-----	-----	-----	-----
-----	37.4	-----	-----	0.	-----	0.	-----
-----	-----	37.4	-----	-----	37.	-----	0.
-----	-----	-----	3.02	-----	-----	-----	-----
-----	36.6	-----	-----	0.	-----	0.	-----
-----	-----	36.0	-----	-----	281.	-----	52.
0.5096	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	3.11	-----	-----	-----	-----
-----	36.4	-----	-----	0.	-----	0.	-----
-----	-----	35.2	-----	-----	357.	-----	131.
0.7234	-----	-----	-----	-----	-----	-----	-----
-----	34.0	-----	1.30	-----	-----	0.	-----
-----	-----	-----	-----	0.	-----	-----	-----
-----	-----	32.7	-----	-----	345.	-----	132.
0.8099	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	2.15	-----	-----	-----	-----

AFF- 8
JP-4 SHALE VS N-BUTANE
1980 JUN 20

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET	SIDE 1 BSCAT 10-4 M-1 MRI-388	SIDE 2 BSCAT 10-4 M-1 MRI-388	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UM3/CC TSI-023	SIDE AER PART TSI-
1 630	-150	-----	-----	-----	-----	-----	-----	---
1 640	-140	0.	0.	0.2	0.2	0.	0.	
1 837	-23	-----	-----	0.2	-----	0.	-----	
1 845	-15	-----	-----	-----	1.2	-----	6.	---
1 905	5	0.	-----	0.2	-----	-1.	-----	49
1 915	15	-----	-----	-----	0.2	-----	1.	---
1 918	18	-----	-----	-----	-----	-----	-----	---
1 1005	65	0.	-----	0.2	-----	0.	-----	89
1 1015	75	-----	0.	-----	0.2	-----	2.	---
1 1017	77	-----	-----	-----	-----	-----	-----	---
1 1105	125	0.	-----	0.2	-----	1.	-----	55
1 1115	135	-----	0.	-----	0.2	-----	9.	---
1 1117	137	-----	-----	-----	-----	-----	-----	---
1 1205	185	0.	-----	0.2	-----	1.	-----	42
1 1215	195	-----	0.	-----	1.2	-----	20.	---
1 1305	245	0.	-----	0.2	-----	-0.	-----	26
1 1315	255	-----	0.	-----	4.4	-----	26.	---
1 1405	305	0.	-----	0.2	-----	0.	-----	51
1 1415	315	-----	0.	-----	9.9	-----	29.	---
1 1416	316	-----	-----	-----	-----	-----	-----	---
1 1505	365	-----	-----	0.2	-----	-1.	-----	59
1 1515	375	-----	3.	-----	12.0	-----	19.	---
1 1605	425	0.	-----	0.2	-----	0.	-----	41
1 1615	435	-----	4.	-----	10.0	-----	11.	---
1 1625	445	-----	-----	-----	-----	-----	-----	---

----- NO DATA TAKEN

SIDE 2 BSCAT 0-4 M-1 RI-388	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UM3/CC TSI-023	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 2 C5-ISOMS PPM SE-52C-2
0.2	0.	0.	0.	0.	0.	0.	
	0.		0.		0.		
1.2	-1.	6.	498.	1.1E 04	-1.	205.	
0.2		1.		1133.		11.	0.0569
	0.		895.		9.		
0.2		2.		1.6E 04		177.	
	1.		556.		13.		
0.2		9.		1.4E 04		410.	
	1.		423.		11.		
1.2	-0.	20.	263.	1.2E 04	1.	638.	
4.4	0.	26.	512.	7874.	4.	695.	
9.9		29.		5008.		610.	
	-1.		592.		-4.		
12.0		19.		2998.		387.	
	0.		418.		3.		
10.0		11.		2087.		212.	0.0023

AFF- 8
JP-4 SHALE VS N-BUTANE
1980 JUN 20

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 2 I-C5 PPM DMS-1	SIDE 2 N-C5 PPM DMS-1	SIDE 2 N-C6 PPM SE-52C-2	SIDE 2 N-C7 PPM SE-52C-2	SIDE 2 N-C8 PPM SE-52C-2	SIDE 1 N-C9 PPM SE-52C-2	SIDE N- PPM SE-5
1 630	-150	-----	-----	-----	-----	-----	-----	-----
1 845	-15	0.0376	0.0435	0.0607	0.0430	-----	-----	0.0
1 917	17	0.0404	0.0527	-----	-----	-----	-----	-----
1 918	18	-----	-----	0.0818	0.0528	0.0498	-----	0.0
1 1016	76	0.0424	0.0525	-----	-----	-----	-----	-----
1 1017	77	-----	-----	0.0794	0.0537	-----	-----	0.0
1 1116	136	0.0396	0.0505	-----	-----	-----	-----	-----
1 1117	137	-----	-----	0.0726	0.0516	-----	-----	0.0
1 1215	195	-----	-----	0.0711	0.0493	-----	-----	0.0
1 1217	197	0.0392	0.0489	-----	-----	-----	-----	-----
1 1315	255	-----	-----	0.0675	0.0481	-----	-----	0.0
1 1416	316	-----	-----	0.0712	0.0617	-----	-----	0.0
1 1417	317	0.0376	0.0470	-----	-----	-----	-----	-----
1 1503	363	-----	-----	-----	-----	-----	0.0013	-----
1 1518	378	0.0356	0.0444	-----	-----	-----	-----	-----
1 1625	445	-----	-----	0.0575	0.0508	0.0173	-----	0.0
1 1640	460	0.0253	0.0330	-----	-----	-----	-----	-----

----- NO DATA TAKEN

SIDE 2 N-C8 PPM	SIDE 1 N-C9 PPM	SIDE 2 N-C9 PPM	SIDE 1 C10 PPM	SIDE 2 C10 PPM	SIDE 1 C11 PPM	SIDE 2 C11 PPM
SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2
-----	-----	-----	-----	-----	-----	-----
-----	-----	0.0632	-----	0.0652	-----	0.0656
-----	-----	-----	-----	-----	-----	-----
0.0498	-----	0.0741	-----	0.0779	-----	0.0740
-----	-----	-----	-----	-----	-----	-----
-----	-----	0.0763	-----	0.0786	-----	0.0786
-----	-----	-----	-----	-----	-----	-----
-----	-----	0.0739	-----	0.0764	-----	0.0766
-----	-----	0.0700	-----	0.0745	-----	0.0742
-----	-----	-----	-----	-----	-----	-----
-----	-----	0.0671	-----	0.0702	-----	0.0728
-----	-----	0.0650	-----	0.0674	-----	0.0681
-----	-----	-----	-----	-----	-----	-----
-----	0.0013	-----	0.0014	-----	0.0069	-----
-----	-----	-----	-----	-----	-----	-----
0.0173	-----	0.0556	-----	0.0584	-----	0.0572
-----	-----	-----	-----	-----	-----	-----

AFF- 8
JP-4 SHALE VS N-BUTANE
1980 JUN 20

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 C12 RAW DATA SE-52C-2	SIDE 2 C12 RAW DATA SE-52C-2	SIDE 2 TOLUENE PPM SE-52C-2	SIDE 2 124TMEBZ RAW DATA SE-52C-2	SIDE 2 M+P-XYL PPM SE-52C-2	SIDE 1 CO PPM BK6800-1	SIDE 1 SI PPM BK6800-1
1 630	-150	-----	-----	-----	-----	-----	-----	---
1 640	-140	-----	-----	-----	-----	-----	2.06	2.
1 820	-40	-----	-----	-----	-----	-----	-----	---
1 837	-23	-----	-----	-----	-----	-----	2.06	---
1 845	-15	-----	23.36	0.1392	6.400	-----	-----	2.
1 852	-8	-----	-----	-----	-----	-----	-----	---
1 905	5	-----	-----	-----	-----	-----	2.06	---
1 915	15	-----	-----	-----	-----	-----	-----	2.
1 918	18	-----	27.01	0.1687	8.192	0.0636	-----	---
1 1005	65	-----	-----	-----	-----	-----	1.85	---
1 1015	75	-----	-----	-----	-----	-----	-----	1.
1 1017	77	-----	30.53	0.1723	8.064	-----	-----	---
1 1105	125	-----	-----	-----	-----	-----	1.85	---
1 1115	135	-----	-----	-----	-----	-----	-----	1.
1 1117	137	-----	30.84	0.1644	7.232	-----	-----	---
1 1205	185	-----	-----	-----	-----	-----	1.85	---
1 1215	195	-----	30.08	0.1580	6.912	-----	-----	1.
1 1243	223	-----	-----	-----	-----	-----	-----	---
1 1305	245	-----	-----	-----	-----	-----	1.85	---
1 1315	255	-----	27.39	0.1527	6.464	-----	-----	1.
1 1340	280	-----	-----	-----	-----	-----	-----	---
1 1405	305	-----	-----	-----	-----	-----	1.85	---
1 1415	315	-----	-----	-----	-----	-----	-----	2.
1 1416	316	-----	27.58	0.1570	5.824	-----	-----	---
1 1503	363	3.088	-----	-----	-----	-----	-----	---
1 1505	365	-----	-----	-----	-----	-----	1.85	---
1 1515	375	-----	-----	-----	-----	-----	-----	2.
1 1534	394	-----	-----	-----	-----	-----	-----	---
1 1554	414	-----	-----	-----	-----	-----	-----	---
1 1605	425	-----	-----	-----	-----	-----	2.06	C ---
1 1615	435	-----	-----	-----	-----	-----	-----	2.
1 1625	445	-----	21.70	0.1293	4.416	0.0409	-----	---

----- NO DATA TAKEN

	SIDE 2 M+P-XYL PPM SE-52C-2	SIDE 1 CO PPM BK6800-1	SIDE 2 CO PPM BK6800-1	SIDE 1 PAN PPM ECD-3	SIDE 2 PAN PPM ECD-3	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA
	-----	-----	-----	-----	-----	-----	-----
	-----	2.06	2.06	-----	-----	-----	-----
	-----	-----	-----	-----	-----	0.023	-----
	-----	2.06	-----	0.001	-----	-----	-----
	-----	-----	2.06	-----	0.001	-----	-----
	-----	-----	-----	-----	-----	-----	0.029
	-----	2.06	-----	0.000	-----	-----	-----
	-----	-----	2.06	-----	0.000	-----	-----
	0.0636	-----	-----	-----	-----	-----	-----
	-----	1.85	-----	0.000	-----	-----	-----
	-----	-----	1.85	-----	0.001	-----	-----
	-----	-----	-----	-----	-----	-----	-----
	-----	1.85	-----	0.000	-----	-----	-----
	-----	-----	1.85	-----	0.002	-----	-----
	-----	-----	-----	-----	-----	-----	-----
	-----	1.85	-----	0.000	-----	-----	-----
	-----	-----	1.85	-----	0.004	-----	-----
	-----	-----	-----	-----	-----	0.025	-----
	-----	1.85	-----	0.000	-----	-----	-----
	-----	-----	1.85	-----	0.007	-----	-----
	-----	-----	-----	-----	-----	-----	0.061
	-----	1.85	-----	0.000	-----	-----	-----
	-----	-----	2.06	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----	-----
	-----	1.85	-----	0.000	-----	-----	-----
	-----	-----	2.06	-----	0.019	-----	-----
	-----	-----	-----	-----	-----	0.040	-----
	-----	-----	-----	-----	-----	-----	0.046
	-----	2.06 C	-----	0.021 E	-----	-----	-----
	-----	-----	2.06 C	-----	0.026	-----	-----
	0.0409	-----	-----	-----	-----	-----	-----

2

AFF- 8
JP-4 SHALE VS N-BUTANE
1980 JUN 20

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 ACETALD PPM 10'C-600	SIDE 1 ACETONE PPM 10'C-600	SIDE 1 MEK PPM 10'C-600	SIDE 1 BUTYRAL PPM 10'C-600	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023	SID PART PART TSI-
1 630	-150	-----	0.0030	0.0004	-----	-----	-----	---
1 640	-140	-----	-----	-----	-----	-----	-----	---
1 837	-23	-----	-----	-----	-----	-----	-----	---
1 845	-15	-----	-----	-----	-----	-----	6012.	---
1 905	5	-----	-----	-----	-----	334.	-----	---
1 915	15	-----	-----	-----	-----	-----	1002.	---
1 1005	65	-----	-----	-----	-----	1002.	-----	-17
1 1015	75	-----	-----	-----	-----	-----	4342.	---
1 1105	125	-----	-----	-----	-----	334.	-----	8
1 1115	135	-----	-----	-----	-----	-----	501.	---
1 1205	185	-----	-----	-----	-----	167.	-----	8
1 1215	195	-----	-----	-----	-----	-----	334.	---
1 1305	245	-----	-----	-----	-----	167.	-----	---
1 1315	255	-----	-----	-----	-----	-----	-167.	---
1 1405	305	-----	-----	-----	-----	334.	-----	---
1 1415	315	-----	-----	-----	-----	-----	668.	---
1 1505	365	-----	-----	-----	-----	501.	-----	17
1 1515	375	-----	-----	-----	-----	-----	1002.	---
1 1605	425	-----	-----	-----	-----	501.	-----	-26
1 1608	428	0.1423	0.0022	0.0656	0.0024	-----	-----	---
1 1615	435	-----	-----	-----	-----	-----	668.	---

----- NO DATA TAKEN

DE 1	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
YRAL	PART.024	PART.024	PART.042	PART.042	PART.075	PART.075
FM	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
C-690	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----
-----	-----	6012.	-----	1218.	-----	1998.
-----	334.	-----	0.	-----	133.	-----
-----	-----	1002.	-----	0.	-----	89.
-----	1002.	-----	-174.	-----	0.	-----
-----	-----	4342.	-----	5568.	-----	5861.
-----	334.	-----	87.	-----	89.	-----
-----	-----	501.	-----	783.	-----	8658.
-----	167.	-----	87.	-----	178.	-----
-----	-----	334.	-----	435.	-----	2886.
-----	167.	-----	0.	-----	44.	-----
-----	-----	-167.	-----	609.	-----	355.
-----	334.	-----	0.	-----	178.	-----
-----	-----	668.	-----	174.	-----	622.
-----	501.	-----	174.	-----	44.	-----
-----	-----	1002.	-----	-87.	-----	0.
-----	501.	-----	-261.	-----	178.	-----
0024	-----	-----	-----	-----	-----	-----
-----	-----	668.	-----	348.	-----	44.

AFF- 8
JP-4 SHALE VS N-BUTANE
1980 JUN 20

CLOCK	ELAPSED	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
TIME	TIME	PART.133	PART.133	PART.237	PART.237	PART.422	PART.422	PART.750	PART.750
DY HR.	(MIN)	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
1 640	-140	-----	-----	-----	-----	-----	-----	-----	-----
1 837	-23	-----	-----	-----	-----	-----	-----	-----	-----
1 845	-15	-----	1639.	-----	234.	-----	13.	-----	7.
1 905	5	24.	-----	0.	-----	13.	-----	-7.	-----
1 915	15	-----	48.	-----	0.	-----	-13.	-----	7.
1 1005	65	48.	-----	12.	-----	7.	-----	0.	-----
1 1015	75	-----	578.	-----	37.	-----	-7.	-----	0.
1 1105	125	48.	-----	-12.	-----	7.	-----	4.	-----
1 1115	135	-----	3736.	-----	123.	-----	40.	-----	0.
1 1205	185	-24.	-----	12.	-----	0.	-----	4.	-----
1 1215	195	-----	7326.	-----	381.	-----	207.	-----	-4.
1 1305	245	48.	-----	0.	-----	7.	-----	-4.	-----
1 1315	255	-----	5109.	-----	1857.	-----	100.	-----	11.
1 1405	305	0.	-----	0.	-----	0.	-----	0.	-----
1 1415	315	-----	1109.	-----	2202.	-----	220.	-----	14.
1 1505	365	-145.	-----	-12.	-----	40.	-----	-11.	-----
1 1515	375	-----	506.	-----	1390.	-----	180.	-----	7.
1 1605	425	0.	-----	0.	-----	0.	-----	0.	-----
1 1615	435	-----	0.	-----	1009.	-----	0.	-----	18.

----- NO DATA TAKEN

NOTES

- A NITRIC ACID TEST; EMPTY SCRUBBER IN LINE
- B NITRIC ACID TEST; NYLON FILTER ON SCRUBBER TO REMOVE HNO3
- C AEROSOL FILTER IN LINE
- D PROBABLE LEAKAGE OF N-BUTANE FROM SIDE 1
- E PAN VALUE QUESTIONABLE

AFF- 9
 JP-4 SHALE: VARIABLE FUEL LEVELS
 1980 JUN 26-27

DAY 1 (JUNE 26)

0624: BAG FILLED WITH PURE AIR AT ~50% R.H.
 0709: 4.75 ML NO2 INJECTED
 0711: 17.0 ML NO INJECTED
 0720: BAG DIVIDED
 0742-0757. 185 MICROLITERS JP-4 SHALE INJECTED INTO SIDE 2.
 0823-0843: 370 MICROLITERS JP-4 SHALE INJECTED INTO SIDE 1.
 0933: SIDE A: WET BULB: 20.5, DRY BULB: 28.5, R.H.: 48%
 0938: SIDE B: WET BULB: 21.5, DRY BULB: 31.0, R.H.: 44%
 0949: BAG UNCOVERED.
 1135: LARGE TEAR DISCOVERED IN SIDE 2 AND REPAIRED.
 1158: PORT ON SIDE 1 WHICH WAS NOT PROPERLY SEALED REPAIRED
 1552: BAG COVERED.

DAY 2 (JUNE 27)

0735: 25% REMAINS OF SIDE 1, 5% OF SIDE 2.
 0836: BAG UNCOVERED.
 1115: RUN ABORTED BECAUSE OF BAG DEFFLATION.

RESULTS:	DAY 1	DAY 2 (TO 1115)
-----	-----	-----
AVG. T (DEG.C)	38 (+-3)	32 (+-5)
AVG. UV (MW/CM2)	3.2 (+-0.8)	2.5 (+-0.4)

T=0 AT 949 PST

BAG NO. 14 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	33.8	6.1	DEG C	SIDE 1
T	DORIC-1	34.0	5.7	DEG C	SIDE 2
UV RAD	EPPLEY-1	2.94	0.71	MW/CM2	

ID	INST.	INITIAL CONC.	UNITS	
NO	B-NOX-1	0.302	PPM	SIDE 1
NO	B-NOX-1	0.305	PPM	SIDE 2
NO2-UNC	B-NOX-1	0.100	PPM	SIDE 1
NO2-UNC	B-NOX-1	0.103	PPM	SIDE 2
THC	BK6800-1	33.72	PPMC	SIDE 1
THC	BK6800-1	20.96	PPMC	SIDE 2

AFF- 9
JP-4 SHALE: VARIABLE FUEL LEVELS
1980 JUN 26-27

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
2750	SE-52C-2	RM-121; 30M SE-52 QUARTZ CAP, GC; FID
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4900	B-03-1	BENDIX O3 ANALYZER MD5513340-X SN32787-5
1790	D-1790	DASIBI 1790 OZONE MONITOR
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
4350	CLIMET	CLIMET 208 OPTICAL PART, CTR;SN:76-148
4130	EPPLEY-1	ARB LAB; EPPLEY 11692 UV RADIOMETER
4000	ECD-3	AF-LAB; 12" 5% CARBOWAX-600 GC; ECD
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
2100	PN-1	RM-121 POROPAK-N GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID

AFF- 9
JP-4 SHALE: VARIABLE FUEL LEVELS
1980 JUN 26-27

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 OZONE PPM D-1790	SIDE 1 OZONE PPM B-03-1	SIDE 2 OZONE PPM D-1790	SIDE 2 OZONE PPM B-03-1	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SIDE NO2-U PPM B-NOX
1 647	-182	-----	0.000	-----	0.000	0.000	0.000	0.0
1 845	-64	-----	-----	-----	0.002	-----	0.305	-----
1 900	-49	-----	0.002	-----	-----	0.302	-----	0.1
1 1005	16	-----	0.004	-----	-----	0.298	-----	0.1
1 1015	26	-----	-----	-----	0.006	-----	0.278	-----
1 1105	76	0.000	0.005	-----	-----	0.231	-----	0.1
1 1115	86	-----	-----	0.001	0.010	-----	0.210	-----
1 1205	136	0.010	0.018	-----	-----	0.146	-----	0.2
1 1215	146	-----	-----	0.014	0.022	-----	0.115	-----
1 1305	196	0.039	0.050	-----	-----	0.050	-----	0.3
1 1315	206	-----	-----	0.063	0.075	-----	0.026	-----
1 1405	256	0.159	0.180	-----	-----	0.003	-----	0.3
1 1415	266	-----	-----	0.180	0.200	-----	0.000	-----
1 1505	316	0.342	0.365	-----	-----	-0.004	-----	0.2
1 1515	326	-----	-----	0.297	0.320	-----	-0.004	-----
2 735	1306	0.102	-----	-----	-----	0.017	-----	0.0
2 745	1316	-----	-----	0.015	-----	-----	0.017	-----
2 805	1336	0.098	-----	-----	-----	0.019	-----	0.0
2 815	1346	-----	-----	0.014	-----	-----	0.016	-----
2 905	1396	0.109	-----	-----	-----	0.018	-----	0.0
2 915	1406	-----	-----	0.139	-----	-----	0.017	-----
2 1005	1456	0.149	-----	-----	-----	0.019	-----	0.0
2 1015	1466	-----	-----	0.222	0.223	-----	0.016	-----
2 1105	1516	0.191	0.190	-----	-----	0.018	-----	0.0
2 1115	1526	-----	-----	0.250	0.255	-----	0.018	-----

----- NO DATA TAKEN

DE 2 ONE PM	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1
0.000	0.000	0.000	0.007	0.007	0.005	0.005
0.002	-----	0.305	-----	0.103	-----	0.420
-----	0.302	-----	0.100	-----	0.417	-----
-----	0.288	-----	0.116	-----	0.416	-----
0.006	-----	0.278	-----	0.125	-----	0.417
-----	0.231	-----	0.157	-----	0.406	-----
0.010	-----	0.210	-----	0.178	-----	0.406
-----	0.146	-----	0.223	-----	0.389	-----
0.022	-----	0.115	-----	0.262	-----	0.387
-----	0.050	-----	0.308	-----	0.364	-----
0.075	-----	0.026	-----	0.327	-----	0.350
-----	0.003	-----	0.325	-----	0.320	-----
0.200	-----	0.000	-----	0.314	-----	0.306
-----	-0.004	-----	0.280	-----	0.266	-----
0.320	-----	-0.004	-----	0.262	-----	0.254
-----	0.017	-----	0.039	-----	0.053	-----
-----	-----	0.017	-----	0.063	-----	0.075
-----	0.019	-----	0.042	-----	0.058	-----
-----	-----	0.016	-----	0.069	-----	0.080
-----	0.018	-----	0.045	-----	0.060	-----
-----	-----	0.017	-----	0.070	-----	0.085
-----	0.019	-----	0.048	-----	0.066	-----
0.223	-----	0.016	-----	0.068	-----	0.080
-----	0.018	-----	0.056	-----	0.071	-----
0.255	-----	0.018	-----	0.064	-----	0.077

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AFF- 9
JP-4 SHALE: VARIABLE FUEL LEVELS
1980 JUN 26-27

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 THC PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-1	SIDE 1 #PART>.3 PART/CC CLIMET	SI #PA PAR CL
1 600	-229	-----	-----	-----	-----	-----	-----	---
1 647	-182	-----	-----	21.9	21.9	-----	1.	---
1 700	-169	-----	-----	-----	-----	-----	-----	---
1 800	-109	-----	-----	-----	-----	-----	-----	---
1 845	-64	-----	20.96	-----	29.4	-----	-----	---
1 900	-49	33.72	-----	29.1	-----	-----	1.	---
1 1000	11	-----	-----	-----	-----	3.11	-----	---
1 1005	16	32.81	-----	32.2	-----	-----	0.	---
1 1015	26	-----	20.96	-----	33.5	-----	-----	---
1 1100	71	-----	-----	-----	-----	3.76	-----	---
1 1105	76	32.81	-----	36.0	-----	-----	0.	---
1 1115	86	-----	20.96	-----	36.5	-----	-----	---
1 1200	131	-----	-----	-----	-----	3.48	-----	---
1 1205	136	32.81	-----	39.2	-----	-----	0.	---
1 1215	146	-----	20.05	-----	38.9	-----	-----	---
1 1300	191	-----	-----	-----	-----	3.83	-----	---
1 1305	196	31.90	-----	40.8	-----	-----	0.	---
1 1315	206	-----	20.05	-----	40.0	-----	-----	---
1 1400	251	-----	-----	-----	-----	3.01	-----	---
1 1405	256	30.98	-----	41.0	-----	-----	39.	---
1 1415	266	-----	17.31	-----	30.3	-----	-----	---
1 1500	311	-----	-----	-----	-----	1.85	-----	---
1 1505	316	30.07	-----	40.0	-----	-----	190.	---
1 1515	326	-----	18.23	-----	38.3	-----	-----	---
1 1600	371	-----	-----	-----	-----	-----	-----	---
2 700	1271	-----	-----	-----	-----	-----	-----	---
2 735	1306	21.87	-----	26.7	-----	-----	34.	---
2 745	1316	-----	18.23	-----	27.0	-----	-----	---
2 800	1331	-----	-----	-----	-----	-----	-----	---
2 805	1336	27.34	-----	28.0	-----	-----	28.	---
2 815	1346	-----	17.31	-----	29.0	-----	-----	---
2 900	1391	-----	-----	-----	-----	2.34	-----	---
2 905	1396	26.43	-----	31.9	-----	-----	38.	---
2 915	1406	-----	14.13	-----	32.9	-----	-----	1
2 1000	1451	-----	-----	-----	-----	2.13	-----	---
2 1005	1456	26.43	-----	35.6	-----	-----	61.	---
2 1015	1466	-----	11.39	-----	36.6	-----	-----	1
2 1100	1511	-----	-----	-----	-----	2.94	-----	---
2 1105	1516	26.43	-----	37.2	-----	-----	65.	---
2 1115	1526	-----	10.02	-----	38.6	-----	-----	---

----- NO DATA TAKEN

UV RAD MW/CM2 EPPLEY-1	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET
-----	-----	-----	-----	-----	-----	-----
-----	1.	1.	0.	0.	0.	0.
-----	-----	-----	-----	-----	-----	-----
-----	-----	1.	-----	0.	-----	-----
-----	1.	-----	0.	-----	0.	-----
3.11	-----	-----	-----	-----	-----	-----
-----	0.	-----	0.	-----	0.	-----
-----	-----	0.	-----	0.	-----	0.
3.76	-----	-----	-----	-----	-----	-----
-----	0.	-----	0.	-----	0.	-----
-----	-----	0.	-----	0.	-----	0.
3.48	-----	-----	-----	-----	-----	-----
-----	0.	-----	0.	-----	0.	-----
-----	-----	0.	-----	0.	-----	0.
3.83	-----	-----	-----	-----	-----	-----
-----	0.	-----	0.	-----	0.	-----
-----	-----	0.	-----	0.	-----	0.
3.01	-----	-----	-----	-----	-----	-----
-----	39.	-----	0.	-----	0.	-----
-----	-----	2.	-----	0.	-----	0.
1.85	-----	-----	-----	-----	-----	-----
-----	190.	-----	20.	-----	0.	-----
-----	-----	5.	-----	0.	-----	0.
-----	-----	-----	-----	-----	-----	-----
-----	34.	-----	0.	-----	0.	-----
-----	-----	6.	-----	0.	-----	0.
-----	-----	-----	-----	-----	-----	-----
-----	28.	-----	0.	-----	0.	-----
-----	-----	5.	-----	0.	-----	0.
2.34	-----	-----	-----	-----	-----	-----
-----	38.	-----	0.	-----	0.	-----
-----	-----	10.	-----	0.	-----	0.
2.13	-----	-----	-----	-----	-----	-----
-----	61.	-----	1.	-----	0.	-----
-----	-----	10.	-----	0.	-----	-----
2.94	-----	-----	-----	-----	-----	-----
-----	65.	-----	1.	-----	0.	-----
-----	-----	7.	-----	0.	-----	0.

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AFF- 9
 JP-4 SHALE: VARIABLE FUEL LEVELS
 1980 JUN 26-27

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 BSCAT 10-4 M-1 MRI-388	SIDE 2 BSCAT 10-4 M-1 MRI-388	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UM3/CC TSI-023	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE AER.S UM2/CC TSI-023
1 647	-182	0.2	0.2	1.	1.	806.	806.	14.	14.
1 845	-64	-----	0.2	-----	0.	-----	1376.	-----	22.
1 900	-49	0.2	-----	0.	-----	1551.	-----	12.	-----
1 1005	16	0.2	-----	1.	-----	608.	-----	14.	-----
1 1015	26	-----	0.2	-----	2.	-----	738.	-----	24.
1 1105	76	0.2	-----	0.	-----	314.	-----	7.	-----
1 1115	86	-----	0.2	-----	3.	-----	604.	-----	22.
1 1205	136	0.2	-----	0.	-----	980.	-----	16.	-----
1 1215	146	-----	0.2	-----	0.	-----	381.	-----	7.
1 1305	196	0.3	-----	2.	-----	835.	-----	53.	-----
1 1315	206	-----	0.2	-----	2.	-----	1.8E 04	-----	147.
1 1405	256	1.2	-----	4.	-----	1116.	-----	77.	-----
1 1415	266	-----	0.7	-----	12.	-----	1.8E 04	-----	533.
1 1505	316	2.3	-----	4.	-----	1667.	-----	62.	-----
1 1515	326	-----	1.8	-----	20.	-----	1.4E 04	-----	720.
2 735	1306	1.1	-----	8.	-----	2390.	-----	125.	-----
2 745	1316	-----	0.8	-----	3.	-----	2758.	-----	87.
2 805	1336	1.0	-----	2.	-----	2175.	-----	70.	-----
2 815	1346	-----	0.7	-----	4.	-----	2152.	-----	92.
2 905	1396	1.2	-----	2.	-----	2657.	-----	66.	-----
2 915	1406	-----	0.8	-----	6.	-----	2.4E 04	-----	294.
2 1005	1456	1.0	-----	3.	-----	664.	-----	44.	-----
2 1015	1466	-----	1.2	-----	17.	-----	8084.	-----	484.
2 1105	1516	1.2	-----	2.	-----	915.	-----	39.	-----
2 1115	1526	-----	1.1	-----	8.	-----	6149.	-----	274.

----- NO DATA TAKEN

AFF- 9

JP-4 SHALE: VARIABLE FUEL LEVELS
1980 JUN 26-27

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 N-C6 PPM DMS-1	SIDE 1 N-C6 PPM SE-52C-2	SIDE 2 N-C6 PPM SE-52C-2	SIDE 2 N-C6 PPM DMS-1	SIDE 1 N-C7 PPM SE-52C-2	SIDE 2 N-C7 PPM SE-52C-2	SIDE N-C PPM SE-52C-2
1 635	-194	-----	-----	-----	-----	-----	-----	-----
1 636	-193	-----	-----	-----	-----	-----	-----	-----
1 810	-99	-----	-----	0.0443	-----	-----	0.0329	-----
1 902	-47	-----	0.0685	-----	-----	0.0500	-----	0.07
1 1005	16	-----	0.0672	-----	-----	-----	-----	-----
1 1045	56	-----	0.0730	-----	-----	0.0489	-----	0.06
1 1138	109	-----	-----	0.0367	-----	-----	-----	-----
1 1245	176	-----	-----	0.0391	-----	-----	0.0345	-----
1 1505	316	-----	-----	-----	-----	-----	-----	-----
1 1531	342	-----	-----	-----	0.0226	-----	-----	-----
2 720	1291	-----	0.0741	-----	-----	0.0484	-----	0.06
2 738	1309	0.0490	-----	-----	-----	-----	-----	-----
2 818	1340	-----	-----	-----	-----	-----	-----	-----
2 819	1350	-----	-----	0.0405	-----	-----	0.0304	-----
2 908	1399	-----	0.0622	-----	-----	0.0450	-----	0.06
2 1013	1464	-----	-----	0.0204	-----	-----	0.0199	-----
2 1105	1516	-----	-----	-----	-----	-----	-----	-----
2 1315	1646	-----	0.0658	-----	-----	0.0400	-----	0.05

----- NO DATA TAKEN

	SIDE 1 N-C7 PPM	SIDE 2 N-C7 PPM	SIDE 1 N-C9 PPM	SIDE 2 N-C9 PPM	SIDE 1 C10 PPM	SIDE 2 C10 PPM
2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2
6	-----	-----	-----	0.0036	-----	0.0080
1	-----	0.0329	-----	0.0401	-----	0.0379
	0.0500	-----	0.0715	-----	0.0678	-----
	0.0489	-----	0.0692	-----	0.0686	-----
	-----	0.0345	-----	0.0402	-----	0.0402
26	-----	-----	-----	-----	-----	-----
	0.0484	-----	0.0641	-----	0.0627	-----
	-----	-----	-----	-----	-----	-----
	-----	0.0304	-----	0.0320	-----	0.0270
	0.0450	-----	0.0640	-----	0.0620	-----
	-----	0.0199	-----	0.0199	-----	0.0178
	-----	-----	-----	-----	-----	-----
	0.0400	-----	0.0521	-----	0.0495	-----

2

AFF- 9
JP-4 SHALE: VARIABLE FUEL LEVELS
1980 JUN 26-27

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 C11 PPM SE-52C-2	SIDE 2 C11 PPM SE-52C-2	SIDE 1 C12 RAW DATA SE-52C-2	SIDE 2 C12 RAW DATA SE-52C-2	SIDE 1 TOLUENE PPM SE-52C-2	SIDE 2 TOLUENE PPM SE-52C-2	SIDE 124TH RAW D SE-52
1 636	-193	-----	0.0141	-----	1.616	-----	-----	-----
1 647	-182	-----	-----	-----	-----	-----	-----	-----
1 810	-99	-----	0.0428	-----	12.61	-----	0.0838	3.9
1 845	-64	-----	-----	-----	-----	-----	-----	-----
1 900	-49	-----	-----	-----	-----	-----	-----	-----
1 902	-47	0.0756	-----	27.90	-----	0.1583	-----	-----
1 1005	16	-----	-----	-----	-----	-----	-----	-----
1 1015	26	-----	-----	-----	-----	-----	-----	-----
1 1045	56	0.0733	-----	29.38	-----	0.1545	-----	-----
1 1105	76	-----	-----	-----	-----	-----	-----	-----
1 1115	86	-----	-----	-----	-----	-----	-----	-----
1 1138	109	-----	-----	-----	-----	-----	-----	-----
1 1205	136	-----	-----	-----	-----	-----	-----	-----
1 1215	146	-----	-----	-----	-----	-----	-----	-----
1 1245	176	-----	-----	-----	17.66	-----	0.0879	7.5
1 1305	196	-----	-----	-----	-----	-----	-----	-----
1 1315	206	-----	-----	-----	-----	-----	-----	-----
1 1405	256	-----	-----	-----	-----	-----	-----	-----
1 1415	266	-----	-----	-----	-----	-----	-----	-----
1 1505	316	-----	-----	-----	-----	-----	-----	-----
1 1515	326	-----	-----	-----	-----	-----	-----	-----
2 720	1291	0.0547	-----	15.42	-----	0.1550	-----	-----
2 735	1306	-----	-----	-----	-----	-----	-----	-----
2 745	1316	-----	-----	-----	-----	-----	-----	-----
2 805	1336	-----	-----	-----	-----	-----	-----	-----
2 815	1346	-----	-----	-----	-----	-----	-----	-----
2 819	1350	-----	0.0274	-----	6.336	-----	0.0772	1.0
2 905	1396	-----	-----	-----	-----	-----	-----	-----
2 908	1399	0.0585	-----	19.01	-----	0.1476	-----	-----
2 915	1406	-----	-----	-----	-----	-----	-----	-----
2 1005	1456	-----	-----	-----	-----	-----	-----	-----
2 1013	1464	-----	0.0227	-----	7.360	-----	0.0506	-----
2 1015	1466	-----	-----	-----	-----	-----	-----	-----
2 1105	1516	-----	-----	-----	-----	-----	-----	-----
2 1115	1526	-----	-----	-----	-----	-----	-----	-----
2 1315	1646	0.0598	-----	18.11	-----	0.1286	-----	-----

----- NO DATA TAKEN

SIDE 1 TOLUENE PPM SE-52C-2	SIDE 2 TOLUENE PPM SE-52C-2	SIDE 2 124TMEBZ RAW DATA SE-52C-2	SIDE 1 CO PPM BK6800-1	SIDE 2 CO PPM BK6800-1	SIDE 1 PAN PPM ECD-3	SIDE 2 PAN PPM ECD-3
-----	-----	-----	-----	-----	0.000	0.000
-----	0.0838	3.904	-----	-----	-----	-----
-----	-----	-----	-----	1.44	-----	0.000
0.1583	-----	-----	1.44	-----	0.000	-----
-----	-----	-----	1.44	-----	0.000	-----
0.1545	-----	-----	-----	1.24	-----	0.000
-----	-----	-----	1.44	-----	0.000	-----
-----	-----	-----	-----	1.44	-----	0.000
-----	-----	-----	1.23	-----	0.000	-----
-----	0.0879	7.552	-----	1.44	-----	0.001
-----	-----	-----	1.23	-----	0.000	-----
-----	-----	-----	-----	1.44	-----	0.001
-----	-----	-----	1.23	-----	0.003	-----
-----	-----	-----	-----	1.44	-----	0.003
-----	-----	-----	1.23	-----	0.007	-----
-----	-----	-----	-----	1.44	-----	0.008
0.1550	-----	-----	-----	-----	-----	-----
-----	-----	-----	1.44	-----	-----	-----
-----	-----	-----	-----	1.65	-----	-----
-----	-----	-----	1.44	-----	0.011	-----
-----	0.0772	1.664	-----	1.65	-----	0.015
0.1476	-----	-----	1.44	-----	0.011	-----
-----	-----	-----	-----	1.65	-----	0.015
-----	0.0506	-----	1.44	-----	0.011	-----
-----	-----	-----	-----	1.65	-----	0.014
-----	-----	-----	1.23	-----	0.010	-----
0.1286	-----	-----	-----	1.44	-----	0.011
-----	-----	-----	-----	-----	-----	-----

0

AFF- 9
 JP-4 SHALE: VARIABLE FUEL LEVELS
 1980 JUN 26-27

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023	SIDE 1 PART.042 PART/CC TSI-023	SIDE 2 PART.042 PART/CC TSI-023	SID PART PART TSI-
1 647	-182	-----	-----	501.	501.	87.	87.	17
1 821	-88	-----	0.061	-----	-----	-----	-----	---
1 845	-64	-----	-----	-----	1002.	-----	-174.	---
1 900	-49	-----	-----	1002.	-----	174.	-----	26
1 920	-29	0.019	-----	-----	-----	-----	-----	---
1 1005	16	-----	-----	0.	-----	609.	-----	13
1 1015	26	-----	-----	-----	501.	-----	0.	---
1 1105	76	-----	-----	0.	-----	174.	-----	13
1 1115	86	-----	-----	-----	334.	-----	174.	---
1 1205	136	-----	-----	334.	-----	174.	-----	40
1 1215	146	-----	-----	-----	167.	-----	0.	---
1 1305	196	-----	-----	0.	-----	174.	-----	8
1 1315	206	-----	-----	-----	9018.	-----	4785.	---
1 1405	256	-----	-----	668.	-----	-87.	-----	17
1 1415	266	-----	-----	-----	1336.	-----	1566.	---
1 1505	316	-----	-----	1002.	-----	174.	-----	17
1 1515	326	-----	-----	-----	1002.	-----	348.	---
1 1544	355	-----	0.061	-----	-----	-----	-----	---
1 1609	380	0.033	-----	-----	-----	-----	-----	---
2 735	1306	-----	-----	1169.	-----	261.	-----	26
2 745	1316	-----	-----	-----	1837.	-----	-87.	---
2 805	1336	-----	-----	835.	-----	522.	-----	26
2 815	1346	-----	-----	-----	835.	-----	435.	---
2 905	1396	-----	-----	1503.	-----	522.	-----	22
2 915	1406	-----	-----	-----	9018.	-----	7308.	---
2 940	1431	0.100	-----	-----	-----	-----	-----	---
2 1005	1456	-----	-----	0.	-----	261.	-----	4
2 1015	1466	-----	-----	-----	167.	-----	2001.	---
2 1105	1516	-----	-----	334.	-----	174.	-----	17
2 1115	1526	-----	-----	-----	668.	-----	0.	---

----- NO DATA TAKEN

SIDE 1 PART.042 PART/CC TSI-023	SIDE 2 PART.042 PART/CC TSI-023	SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023	SIDE 1 PART.133 PART/CC TSI-023	SIDE 2 PART.133 PART/CC TSI-023
--	--	--	--	--	--

87.	87.	178.	178.	24.	24.
-----	-----	-----	-----	-----	-----
174.	-174.	266.	488.	121.	-24.
-----	-----	-----	-----	-----	-----
609.	-----	133.	-----	121.	-----
-----	0.	-----	133.	-----	72.
174.	-----	133.	-----	0.	-----
-----	174.	-----	89.	-----	-24.
174.	-----	400.	-----	48.	-----
-----	0.	-----	178.	-----	24.
174.	-----	89.	-----	506.	-----
-----	4785.	-----	3996.	-----	482.
-87.	-----	178.	-----	72.	-----
-----	1566.	-----	9502.	-----	5254.
174.	-----	178.	-----	169.	-----
-----	348.	-----	3197.	-----	8580.
-----	-----	-----	-----	-----	-----
261.	-----	266.	-----	410.	-----
-----	-87.	-----	266.	-----	506.
522.	-----	266.	-----	313.	-----
-----	435.	-----	311.	-----	217.
522.	-----	222.	-----	193.	-----
-----	7308.	-----	5816.	-----	1277.
-----	-----	-----	-----	-----	-----
261.	-----	44.	-----	313.	-----
-----	2001.	-----	1820.	-----	2530.
174.	-----	178.	-----	121.	-----
-----	0.	-----	2575.	-----	2530.

AFF- 9
JP-4 SHALE: VARIABLE FUEL LEVELS
1980 JUN 26-27

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.237 PART/CC TSI-023	SIDE 2 PART.237 PART/CC TSI-023	SIDE 1 PART.422 PART/CC TSI-023	SIDE 2 PART.422 PART/CC TSI-023	SIDE 1 PART.750 PART/CC TSI-023	SIDE 2 PART.750 PART/CC TSI-023
1 647	-182	12.	12.	0.	0.	4.	4.
1 845	-64	-----	74.	-----	13.	-----	-4.
1 900	-49	-12.	-----	0.	-----	0.	-----
1 1005	16	-62.	-----	0.	-----	7.	-----
1 1015	26	-----	25.	-----	0.	-----	7.
1 1105	76	0.	-----	7.	-----	0.	-----
1 1115	86	-----	37.	-----	-20.	-----	14.
1 1205	136	25.	-----	0.	-----	0.	-----
1 1215	146	-----	12.	-----	0.	-----	0.
1 1305	196	49.	-----	13.	-----	4.	-----
1 1315	206	-----	25.	-----	-7.	-----	4.
1 1405	256	258.	-----	20.	-----	7.	-----
1 1415	266	-----	271.	-----	13.	-----	4.
1 1505	316	111.	-----	27.	-----	7.	-----
1 1515	326	-----	861.	-----	33.	-----	7.
2 735	1306	246.	-----	13.	-----	25.	-----
2 745	1316	-----	209.	-----	27.	-----	0.
2 805	1336	221.	-----	20.	-----	-4.	-----
2 815	1346	-----	344.	-----	7.	-----	4.
2 905	1396	197.	-----	20.	-----	0.	-----
2 915	1406	-----	234.	-----	40.	-----	0.
2 1005	1456	25.	-----	13.	-----	7.	-----
2 1015	1466	-----	1525.	-----	33.	-----	7.
2 1105	1516	98.	-----	7.	-----	4.	-----
2 1115	1526	-----	332.	-----	40.	-----	4.

----- NO DATA TAKEN

AFF- 10
JP-4 SHALE; VARIABLE NOX
1980 JULY 2-3

DAY 1 (JULY 2)

0615: BAG FILLED WITH PURE AIR.
0740-0800: 709 MICROLITERS JP-4 (SHALE) INJECTED
0855: DRY BULB= 28.0, WET BULB= 21.5, R.H.= 57%
0905: BAG DIVIDED.
0908: 2.6 NL NO2 ADDED TO SIDE 1
0911: 7.9 ML NO ADDED TO SIDE 1
0940: 1.3 ML NO2 ADDED TO SIDE 2
0942: 4.0 ML NO ADDED TO SIDE 2
1017: BAG UNCOVERED.
1625: BAG COVERED.

DAY 2 (JULY 3)

0700: SIDE A ~15% FULL, SIDE B ~30% FULL
0802: BAG UNCOVERED.
1430: SIDE A ESSENTIALLY EMPTY, SIDE B ~15%

RESULTS:	DAY 1	DAY 2
-----	-----	-----
AVG. T (DEG.C)	34 (+-1)	30 (+-5)
AVG. UV (MW/CM2)	3.3 (+-.8)	3.4 (+-1.0)

T=0 AT 1017 PST

BAG NO. 14 USED

42

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	30.8	4.9	DEG C	SIDE 1
T	DORIC-1	32.4	4.5	DEG C	SIDE 2
UV RAD	EPPLEY-1	3.37	0.80	MW/CM2	

ID	INST.	INITIAL CONC.	UNITS	
NO	B-NOX-1	0.372	PPM	SIDE 1
NO	B-NOX-1	0.142	PPM	SIDE 2
NO2-UNC	B-NOX-1	0.125	PPM	SIDE 1
NO2-UNC	B-NOX-1	0.075	PPM	SIDE 2
THC	BK6800-1	26.49	PPMC	SIDE 1
THC	BK6800-1	26.49	PPMC	SIDE 2

AFF- 10
JP-4 SHALE; VARIABLE NOX
1980 JULY 2-3

INSTRUMENTS USED			SAMPLING RATE (ML/MIN)
ID	LABEL	DESCRIPTION	
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030	
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:15503	
4900	B-03-1	BENDIX 93 ANALYZER MD5513340-X SN32787-5	
1790	D-1790	DASIBI 1790 OZONE MONITOR	
2100	PN-1	RM-121 POROPAK-N GC; FID	
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479	
2750	SE-52C-2	RM-121; 30M SE-52 QUARTZ CAP. GC; FID	
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID	
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID	
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2	
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D	
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148	
4130	EPPLEY-1	ARB LAB; EPPLEY 11692 UV RADIOMETER	
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS	
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID	
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD	

AFF- 10
JP-4 SHALE; VARIABLE NOX
1980 JULY 2-3

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 OZONE PPM B-03-1	SIDE 1 OZONE PPM D-1790	SIDE 2 OZONE PPM B-03-1	SIDE 2 OZONE PPM D-1790	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SII NO2- PF B-NC
1 658	-199	0.000	-0.003	0.000	-0.003	0.000	0.000	0.
1 920	-57	0.001	0.000	-----	-----	0.372	-----	0.
1 959	-18	-----	-----	0.001	0.000	-----	0.142	---
1 1105	48	0.007	0.001	-----	-----	0.252	-----	0.
1 1115	58	-----	-----	0.021	0.015	-----	0.077	---
1 1205	108	0.013	0.012	-----	-----	0.158	-----	0.
1 1215	118	-----	-----	0.065	0.057	-----	0.025	---
1 1305	168	0.040	0.030	-----	-----	0.066	-----	0.
1 1315	178	-----	-----	0.185	0.166	-----	0.005	---
1 1405	228	0.120	0.110	-----	-----	0.021	-----	0.
1 1415	238	-----	-----	0.352	0.322	-----	0.060	---
1 1505	288	0.250	0.236	-----	-----	0.009	-----	0.
1 1515	298	-----	-----	0.497	0.458	-----	0.002	---
1 1605	348	0.360	0.337	-----	-----	0.000	-----	0.
1 1615	358	-----	-----	0.540	0.508	-----	0.002	---
2 805	1308	0.059	0.056	-----	-----	-0.003	-----	0.
2 815	1318	-----	-----	0.366	0.334	-----	-0.003	---
2 905	1368	0.089	0.086	-----	-----	0.000	-----	0.
2 915	1378	-----	-----	0.350	0.319	-----	0.007	---
2 1005	1428	0.130	0.124	-----	-----	0.009	-----	0.
2 1015	1438	-----	-----	0.338	0.309	-----	0.009	---
2 1105	1488	0.170	0.164	-----	-----	0.006	-----	0.
2 1115	1498	-----	-----	0.335	0.307	-----	0.009	---
2 1205	1548	0.217	0.209	-----	-----	0.007	-----	0.
2 1215	1558	-----	-----	0.330	0.304	-----	0.008	---
2 1305	1608	0.255	0.250	-----	-----	0.007	-----	0.
2 1315	1618	-----	-----	0.327	0.300	-----	0.007	---
2 1405	1668	0.280	0.273	-----	-----	0.007	-----	0.
2 1415	1678	-----	-----	0.322	0.298	-----	0.009	---
2 1515	1738	-----	-----	0.314	0.292	-----	0.007	---
2 1605	1788	-----	-----	0.297	0.274	-----	0.003	---

----- NO DATA TAKEN

SIDE 2 ZONE PPM	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1
-1790						
0.003	0.000	0.000	0.000	0.000	0.000	0.000
	0.372		0.125		0.495	
		0.142		0.075		0.216
0.000	0.252		0.168		0.437	
		0.077		0.130		0.205
0.015	0.158		0.242		0.418	
		0.025		0.172		0.191
0.057	0.066		0.324		0.392	
		0.005		0.167		0.168
0.166	0.021		0.350		0.362	
		0.060		0.140		0.138
0.322	0.009		0.327		0.324	
		0.002		0.103		0.103
0.458	0.000		0.288		0.280	
		0.002		0.080		0.079
0.508						
	-0.003		0.048		0.045	
		-0.003		0.028		0.026
0.334	0.000		0.042		0.041	
		0.007		0.028		0.029
0.319	0.009		0.046		0.051	
		0.009		0.029		0.033
0.309	0.006		0.047		0.057	
		0.009		0.032		0.038
0.307	0.007		0.061		0.062	
		0.008		0.034		0.038
0.304	0.007		0.068		0.068	
		0.007		0.035		0.038
0.300	0.007		0.072		0.073	
		0.009		0.037		0.040
0.298		0.007		0.033		0.036
0.292		0.003		0.039		0.039
0.274						

AFF- 10
JP-4 SHALE; VARIABLE NOX
1980 JULY 2-3

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 THC PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-1	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE #PART> PART/CC CLIME
1 658	-199	-----	-----	22.7	22.7	-----	2.	2.
1 920	-57	26.49	-----	27.9	-----	-----	2.	-----
1 959	-18	-----	26.49	-----	28.8	-----	-----	2.
1 1000	-17	-----	-----	-----	-----	-----	-----	-----
1 1030	13	-----	-----	-----	-----	3.38	-----	-----
1 1100	43	-----	-----	-----	-----	3.95	-----	-----
1 1105	48	25.78	-----	31.4	-----	-----	1.	-----
1 1115	58	-----	26.49	-----	34.0	-----	-----	2.
1 1130	73	-----	-----	-----	-----	4.25	-----	-----
1 1200	103	-----	-----	-----	-----	3.48	-----	-----
1 1205	108	25.78	-----	34.0	-----	-----	1.	-----
1 1215	118	-----	25.78	-----	35.0	-----	-----	2.
1 1230	133	-----	-----	-----	-----	4.14	-----	-----
1 1300	163	-----	-----	-----	-----	3.59	-----	-----
1 1305	168	25.78	-----	36.4	-----	-----	1.	-----
1 1315	178	-----	25.78	-----	35.0	-----	-----	7.
1 1330	193	-----	-----	-----	-----	3.99	-----	-----
1 1400	223	-----	-----	-----	-----	3.39	-----	-----
1 1405	228	25.06	-----	34.4	-----	-----	11.	-----
1 1415	238	-----	25.06	-----	33.8	-----	-----	218
1 1430	253	-----	-----	-----	-----	3.75	-----	-----
1 1500	283	-----	-----	-----	-----	3.02	-----	-----
1 1505	288	24.34	-----	34.5	-----	-----	163.	-----
1 1515	298	-----	24.34	-----	33.0	-----	-----	339
1 1530	313	-----	-----	-----	-----	2.46	-----	-----
1 1600	343	-----	-----	-----	-----	1.87	-----	-----
1 1605	348	23.63	-----	32.0	-----	-----	255.	-----
1 1615	358	-----	22.91	-----	32.5	-----	-----	342
1 1630	373	-----	-----	-----	-----	1.97	-----	-----
2 800	1303	-----	-----	-----	-----	1.55	-----	-----
2 805	1308	22.91	-----	21.2	-----	-----	9.	-----
2 815	1318	-----	22.91	-----	22.2	-----	-----	25
2 830	1333	-----	-----	-----	-----	1.75	-----	-----
2 900	1363	-----	-----	-----	-----	3.19	-----	-----
2 905	1368	21.48	-----	24.3	-----	-----	6.	-----
2 915	1378	-----	22.91	-----	27.5	-----	-----	18
2 930	1393	-----	-----	-----	-----	3.15	-----	-----
2 1000	1423	-----	-----	-----	-----	3.76	-----	-----
2 1005	1428	21.48	-----	28.8	-----	-----	5.	-----
2 1015	1438	-----	22.55	-----	32.0	-----	-----	14
2 1030	1453	-----	-----	-----	-----	4.01	-----	-----
2 1100	1483	-----	-----	-----	-----	4.15	-----	-----
2 1105	1488	21.48	-----	30.0	-----	-----	18.	-----
2 1115	1498	-----	22.20	-----	34.2	-----	-----	27
2 1130	1513	-----	-----	-----	-----	4.29	-----	-----
2 1200	1543	-----	-----	-----	-----	4.21	-----	-----
2 1205	1548	21.48	-----	32.8	-----	-----	46.	-----
2 1215	1558	-----	21.48	-----	36.8	-----	-----	68
2 1230	1573	-----	-----	-----	-----	3.73	-----	-----
2 1300	1603	-----	-----	-----	-----	3.72	-----	-----
2 1305	1608	20.76	-----	34.8	-----	-----	63.	-----

----- NO DATA TAKEN

2	UV RAD	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
EG C	MW/CM2	#PART>.3	#PART>.3	#PART>.5	#PART>.5	#PART>1	#PART>1
IC-1	EPPLEY-1	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
		CLIMET	CLIMET	CLIMET	CLIMET	CLIMET	CLIMET
2.7	-----	2.	2.	0.	0.	-----	-----
	-----	2.	-----	0.	-----	0.	-----
8.8	-----	-----	2.	-----	0.	-----	0.
	-----	-----	-----	-----	-----	-----	-----
	3.38	-----	-----	-----	-----	-----	-----
	3.95	-----	-----	-----	-----	-----	-----
	-----	1.	-----	0.	-----	0.	-----
4.0	-----	-----	2.	-----	0.	-----	0.
	-----	-----	-----	-----	-----	-----	-----
	4.25	-----	-----	-----	-----	-----	-----
	3.48	-----	-----	-----	-----	-----	-----
	-----	1.	-----	0.	-----	0.	-----
5.0	-----	-----	2.	-----	0.	-----	0.
	-----	-----	-----	-----	-----	-----	-----
	4.14	-----	-----	-----	-----	-----	-----
	3.59	-----	-----	-----	-----	-----	-----
	-----	1.	-----	0.	-----	0.	-----
5.0	-----	-----	7.	-----	0.	-----	0.
	-----	-----	-----	-----	-----	-----	-----
	3.99	-----	-----	-----	-----	-----	-----
	3.39	-----	-----	-----	-----	-----	-----
	-----	11.	-----	0.	-----	0.	-----
3.8	-----	-----	218.	-----	22.	-----	0.
	-----	-----	-----	-----	-----	-----	-----
	3.75	-----	-----	-----	-----	-----	-----
	3.02	-----	-----	-----	-----	-----	-----
	-----	163.	-----	10.	-----	0.	-----
3.0	-----	-----	339.	-----	112.	-----	2.
	-----	-----	-----	-----	-----	-----	-----
	2.46	-----	-----	-----	-----	-----	-----
	1.87	-----	-----	-----	-----	-----	-----
	-----	255.	-----	50.	-----	0.	-----
32.5	-----	-----	342.	-----	129.	-----	4.
	-----	-----	-----	-----	-----	-----	-----
	1.97	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----	-----
	1.55	-----	-----	-----	-----	-----	-----
	-----	9.	-----	2.	-----	0.	-----
22.2	-----	-----	25.	-----	17.	-----	0.
	-----	-----	-----	-----	-----	-----	-----
	1.75	-----	-----	-----	-----	-----	-----
	3.19	-----	-----	-----	-----	-----	-----
	-----	6.	-----	1.	-----	0.	-----
27.5	-----	-----	18.	-----	12.	-----	0.
	-----	-----	-----	-----	-----	-----	-----
	3.15	-----	-----	-----	-----	-----	-----
	3.76	-----	-----	-----	-----	-----	-----
	-----	5.	-----	1.	-----	0.	-----
32.0	-----	-----	14.	-----	8.	-----	0.
	-----	-----	-----	-----	-----	-----	-----
	4.01	-----	-----	-----	-----	-----	-----
	4.15	-----	-----	-----	-----	-----	-----
	-----	18.	-----	1.	-----	0.	-----
34.2	-----	-----	27.	-----	6.	-----	0.
	-----	-----	-----	-----	-----	-----	-----
	4.29	-----	-----	-----	-----	-----	-----
	4.21	-----	-----	-----	-----	-----	-----
	-----	46.	-----	1.	-----	0.	-----
36.8	-----	-----	68.	-----	5.	-----	0.
	-----	-----	-----	-----	-----	-----	-----
	3.73	-----	-----	-----	-----	-----	-----
	3.72	-----	-----	-----	-----	-----	-----
	-----	63.	-----	1.	-----	0.	-----

2

AFF- 10
 JP-4 SHALE; VARIABLE NOX
 1980 JULY 2-3

CLOCK	ELAPSED	SIDE 1	SIDE 2	SIDE 1	SIDE 2	UV RAD	SIDE 1	SIDE 2
TIME	TIME	THC	THC	T	T	MW/CM2	#PART>.3	#PART
DY HR.	(MIN)	PPMC	PPMC	DEG C	DEG C	EPPLEY-1	PART/CC	PART
		BK6800-1	BK6800-1	DORIC-1	DORIC-1		CLIMET	CLIMET
2 1315	1618	-----	21.48	-----	36.2	-----	-----	11
2 1330	1633	-----	-----	-----	-----	3.53	-----	---
2 1400	1663	-----	-----	-----	-----	3.16	-----	---
2 1405	1668	20.05	-----	36.2	-----	-----	50.	---
2 1415	1678	-----	21.48	-----	37.0	-----	-----	10
2 1430	1693	-----	-----	-----	-----	3.58	-----	---
2 1515	1738	-----	21.48	-----	36.5	-----	-----	6
2 1605	1788	-----	21.48	-----	32.8	-----	-----	4

----- NO DATA TAKEN

	UV RAD	SIDE 1 #PART>.3	SIDE 2 #PART>.3	SIDE 1 #PART>.5	SIDE 2 #PART>.5	SIDE 1 #PART>1	SIDE 2 #PART>1
	MW/CM2	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
	EPPLEY-1	CLIMET	CLIMET	CLIMET	CLIMET	CLIMET	CLIMET
2	-----	-----	110.	-----	5.	-----	0.
C	3.53	-----	-----	-----	-----	-----	-----
-1	3.16	-----	-----	-----	-----	-----	-----
2	-----	50.	-----	1.	-----	0.	-----
0	-----	-----	100.	-----	5.	-----	0.
5	3.58	-----	-----	-----	-----	-----	-----
8	-----	-----	67.	-----	3.	-----	0.
	-----	-----	43.	-----	2.	-----	0.

AFF- 10
JP-4 SHALE; VARIABLE NOX
1980 JULY 2-3

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 BSCAT 10-4 M-1 MRI-388	SIDE 2 BSCAT 10-4 M-1 MRI-388	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UM3/CC TSI-023	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SID AER UM2 TSI-
1 658	-199	0.4	0.4	1.	1.	963.	963.	1
1 918	-59	-----	-----	-----	-----	-----	-----	---
1 920	-57	0.2	-----	0.	-----	1155.	-----	1
1 959	-18	-----	0.2	-----	-2.	-----	812.	---
1 1006	-11	-----	-----	-----	-----	-----	-----	---
1 1105	48	0.3	-----	-0.	-----	1308.	-----	---
1 1115	58	-----	0.3	-----	2.	-----	7491.	---
1 1205	108	0.3	-----	2.	-----	4944.	-----	10
1 1215	118	-----	0.5	-----	6.	-----	8371.	---
1 1305	168	0.6	-----	5.	-----	5169.	-----	20
1 1315	178	-----	2.1	-----	12.	-----	6746.	---
1 1405	228	1.6	-----	5.	-----	6060.	-----	20
1 1415	238	-----	6.3	-----	18.	-----	6613.	---
1 1505	288	4.0	-----	9.	-----	4931.	-----	25
1 1506	289	-----	-----	-----	-----	-----	-----	---
1 1515	298	-----	9.8	-----	15.	-----	4739.	---
1 1605	348	5.5	-----	9.	-----	3556.	-----	21
1 1612	355	-----	-----	-----	-----	-----	-----	---
1 1615	358	-----	9.9	-----	10.	-----	4077.	---
2 730	1273	-----	-----	-----	-----	-----	-----	---
2 805	1308	0.2	-----	1.	-----	1956.	-----	3
2 815	1318	-----	0.5	-----	0.	-----	1574.	---
2 820	1323	-----	-----	-----	-----	-----	-----	---
2 905	1368	0.2	-----	1.	-----	2310.	-----	3
2 907	1370	-----	-----	-----	-----	-----	-----	---
2 915	1378	-----	0.5	-----	2.	-----	3341.	---
2 1005	1428	0.4	-----	2.	-----	4786.	-----	8
2 1014	1437	-----	-----	-----	-----	-----	-----	---
2 1015	1438	-----	1.1	-----	9.	-----	=21612	---
2 110	1486	-----	-----	-----	-----	-----	-----	---
2 1105	1488	0.7	-----	2.	-----	4086.	-----	9
2 1115	1498	-----	1.2	-----	4.	-----	4106.	---
2 1205	1548	1.0	-----	3.	-----	3391.	-----	9
2 1215	1558	-----	1.2	-----	3.	-----	5070.	---
2 1303	1606	-----	-----	-----	-----	-----	-----	---
2 1305	1608	0.8	-----	2.	-----	3230.	-----	6
2 1315	1618	-----	1.2	-----	1.	-----	3524.	---
2 1405	1668	0.8	-----	2.	-----	6424.	-----	9
2 1413	1676	-----	-----	-----	-----	-----	-----	---
2 1415	1678	-----	1.0	-----	2.	-----	6577.	---
2 1506	1729	-----	-----	-----	-----	-----	-----	---
2 1515	1738	-----	0.8	-----	6.	-----	1.5E 04	---
2 1602	1785	-----	-----	-----	-----	-----	-----	---
2 1605	1788	-----	0.6	-----	8.	-----	1.8E 04	---

----- NO DATA TAKEN

E 2 S.V /CC 023	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 1 N-C4 PPM DMS-1	SIDE 2 N-C4 PPM DMS-1
1.	963.	963.	18.	18.	0.0009	0.0009
	1155.		10.		0.0520	
2.		812.		-7.		
	1308.		7.			0.0449
2.		7491.		91.		
	4944.		100.			
6.		8371.		264.		
	5169.		209.			
2.		6746.		405.		
	6060.		202.			
8.		6613.		436.		0.0514
	4931.		251.			
					0.0519	
5.		4739.		336.		
	3556.		212.			
						0.0513
0.		4077.		222.		
					0.0530	
	1956.		32.			
0.		1574.		20.		
						0.0522
	2310.		36.			
					0.0531	
2.		3341.		75.		
	4786.		84.			
						0.0527
7.		=21612		344.		
					0.0521	
	4086.		96.			
4.		4106.		138.		
	3391.		96.			
3.		5070.		121.		0.0504
					0.0509	
	3230.		68.			
1.		3524.		65.		
	6424.		95.			
2.		6577.		107.		
						0.0518
6.		1.5E 04		272.		
						0.0512
8.		1.8E 04		385.		

AFF- 10
JP-4 SHALE; VARIABLE NOX
1980 JULY 2-3

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 I-C5 PPH DMS-1	SIDE 2 I-C5 PPH DMS-1	SIDE 1 N-C5 PPH DMS-1	SIDE 2 N-C5 PPH DMS-1	SIDE 1 2ME-C5 PPH DMS-1	SIDE 2 2ME-C5 PPH DMS-1	SIDE 1 3ME-C5 PPH DMS-1	SIDE 2 3ME-C5 PPH DMS-1
1 658	-199	0.0002	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1 918	-59	0.0326	-----	0.0405	-----	0.0358	-----	0.0183	-----
1 1006	-11	-----	0.0280	-----	0.0347	-----	0.0283	-----	0.0150
1 1305	168	0.0323	-----	0.0404	-----	0.0351	-----	0.0171	-----
1 1415	238	-----	0.0323	-----	0.0391	-----	0.0365	-----	0.0170
1 1506	289	0.0334	-----	0.0389	-----	0.0353	-----	0.0169	-----
1 1612	355	-----	0.0325	-----	0.0395	-----	0.0338	-----	0.0172
2 730	1273	0.0328	-----	0.0406	-----	0.0352	-----	0.0171	-----
2 820	1323	-----	0.0325	-----	0.0400	-----	0.0319	-----	0.0170
2 907	1370	0.0326	-----	0.0407	-----	0.0367	-----	0.0163	-----
2 1014	1437	-----	0.0321	-----	0.0405	-----	0.0327	-----	0.0167
2 1103	1486	0.0317	-----	0.0407	-----	0.0338	-----	0.0181	-----
2 1215	1558	-----	0.0320	-----	0.0386	-----	0.0334	-----	0.0168
2 1303	1606	0.0311	-----	0.0386	-----	0.0310	-----	0.0159	-----
2 1413	1676	-----	0.0314	-----	0.0391	-----	0.0339	-----	0.0165
2 1506	1729	-----	0.0311	-----	0.0372	-----	0.0323	-----	0.0160
2 1602	1785	-----	0.0325	-----	0.0392	-----	0.0315	-----	0.0158

----- NO DATA TAKEN

AFF- 10
JP-4 SHALE; VARIABLE NOX
1980 JULY 2-3

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 N-C6 PPM DMS-1	SIDE 1 N-C6 PPM SE-52C-2	SIDE 2 N-C6 PPM DMS-1	SIDE 2 N-C6 PPM SE-52C-2	SIDE 1 N-C7 PPM SE-52C-2	SIDE 2 N-C7 PPM SE-52C-2	SIDE N-C PPM SE-52
1 658	-199	0.0000	-----	0.0000	-----	-----	-----	-----
1 918	-59	0.0450	0.0716	-----	-----	0.0443	-----	0.05
1 1006	-11	-----	-----	0.0381	-----	-----	-----	-----
1 1305	168	0.0446	-----	-----	-----	-----	-----	-----
1 1415	238	-----	-----	0.0431	-----	-----	-----	-----
1 1506	289	0.0466	-----	-----	-----	-----	-----	-----
1 1612	355	-----	-----	0.0440	-----	-----	-----	-----
2 730	1273	0.0440	-----	-----	-----	-----	-----	-----
2 820	1323	-----	-----	0.0430	-----	-----	-----	-----
2 907	1370	0.0440	-----	-----	-----	-----	-----	-----
2 1014	1437	-----	-----	0.0437	-----	-----	-----	-----
2 1103	1486	0.0430	-----	-----	-----	-----	-----	-----
2 1205	1548	-----	-----	-----	-----	0.0710	-----	0.09
2 1215	1558	-----	-----	0.0420	-----	-----	-----	-----
2 1303	1606	0.0400	-----	-----	-----	-----	-----	-----
2 1313	1616	-----	-----	-----	-----	-----	-----	-----
2 1405	1668	-----	0.0458	-----	-----	0.0342	-----	0.04
2 1413	1676	-----	-----	0.0417	-----	-----	-----	-----
2 1455	1718	-----	-----	-----	0.1052	-----	0.0685	-----
2 1506	1729	-----	-----	0.0424	-----	-----	-----	-----
2 1602	1785	-----	-----	0.0411	-----	-----	-----	-----

----- NO DATA TAKEN

	SIDE 1 N-C7 PPM	SIDE 2 N-C7 PPM	SIDE 1 N-C9 PPM	SIDE 2 N-C9 PPM	SIDE 1 C10 PPM	SIDE 2 C10 PPM
-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2
	0.0443		0.0592		0.0573	
	0.0710		0.0989		0.1018	
				0.0931		0.0965
	0.0342		0.0467		0.0525	
52		0.0685		0.0986		0.1031

AFF- 10
JP-4 SHALE; VARIABLE NOX
1980 JULY 2-3

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 C11 PPM SE-52C-2	SIDE 2 C11 PPM SE-52C-2	SIDE 1 TOLUENE PPM SE-52C-2	SIDE 1 TOLUENE PPM 10'C-600	SIDE 2 TOLUENE PPM SE-52C-2	SIDE 2 TOLUENE PPM 10'C-600	SI 124 RAW VAR
1 658	-199	-----	-----	-----	0.0002	-----	0.0002	--
1 918	-59	0.0506	-----	0.1377	0.0274	-----	-----	S
1 920	-57	-----	-----	-----	-----	-----	-----	--
1 959	-18	-----	-----	-----	-----	-----	-----	--
1 1006	-11	-----	-----	-----	-----	-----	0.0261	--
1 1105	48	-----	-----	-----	-----	-----	-----	--
1 1115	58	-----	-----	-----	-----	-----	-----	--
1 1205	108	-----	-----	-----	-----	-----	-----	--
1 1215	118	-----	-----	-----	-----	-----	-----	--
1 1305	169	-----	-----	-----	0.0257	-----	-----	--
1 1315	178	-----	-----	-----	-----	-----	-----	--
1 1405	228	-----	-----	-----	-----	-----	-----	--
1 1415	238	-----	-----	-----	-----	-----	0.0265	--
1 1505	288	-----	-----	-----	-----	-----	-----	--
1 1506	289	-----	-----	-----	0.0261	-----	-----	--
1 1515	298	-----	-----	-----	-----	-----	-----	--
1 1605	348	-----	-----	-----	-----	-----	-----	--
1 1612	355	-----	-----	-----	-----	-----	0.0272	--
1 1615	358	-----	-----	-----	-----	-----	-----	--
2 730	1273	-----	-----	-----	0.0279	-----	-----	--
2 805	1308	-----	-----	-----	-----	-----	-----	--
2 815	1318	-----	-----	-----	-----	-----	-----	--
2 820	1323	-----	-----	-----	-----	-----	0.0246	--
2 905	1368	-----	-----	-----	-----	-----	-----	--
2 907	1370	-----	-----	-----	0.0268	-----	-----	--
2 915	1378	-----	-----	-----	-----	-----	-----	--
2 1005	1428	-----	-----	-----	-----	-----	-----	--
2 1014	1437	-----	-----	-----	-----	-----	0.0257	--
2 1015	1438	-----	-----	-----	-----	-----	-----	--
2 1103	1486	-----	-----	-----	0.0263	-----	-----	--
2 1105	1488	-----	-----	-----	-----	-----	-----	--
2 1115	1498	-----	-----	-----	-----	-----	-----	--
2 1205	1548	-----	-----	0.2155	-----	-----	-----	--
2 1215	1558	-----	-----	-----	-----	-----	0.0244	--
2 1303	1606	-----	-----	-----	0.0259	-----	-----	--
2 1305	1608	-----	-----	-----	-----	-----	-----	--
2 1313	1616	-----	0.1015	-----	-----	0.1382	-----	--
2 1315	1618	-----	-----	-----	-----	-----	-----	--
2 1405	1668	0.0523	-----	0.1037	-----	-----	-----	3
2 1413	1676	-----	-----	-----	-----	-----	0.0255	--
2 1415	1678	-----	-----	-----	-----	-----	-----	--
2 1455	1718	-----	0.0993	-----	-----	0.2114	-----	--
2 1506	1729	-----	-----	-----	-----	-----	0.0255	--
2 1515	1738	-----	-----	-----	-----	-----	-----	--
2 1602	1785	-----	-----	-----	-----	-----	0.0248	--
2 1605	1788	-----	-----	-----	-----	-----	-----	--

----- NO DATA TAKEN

SIDE 2 TOLUENE PPM SE-52C-2	SIDE 2 TOLUENE PPM 10'C-600	SIDE 1 124TMEBZ RAW DATA VAR 3700	SIDE 2 124TMEBZ RAW DATA VAR 3700	SIDE 1 CO PPM BK6800-1	SIDE 2 CO PPM BK6800-1
-----	0.0002	-----	-----	-----	-----
-----	-----	5.824	-----	-----	-----
-----	-----	-----	-----	0.98	-----
-----	-----	-----	-----	-----	0.98
-----	0.0261	-----	-----	-----	-----
-----	-----	-----	-----	0.98	-----
-----	-----	-----	-----	-----	0.39
-----	-----	-----	-----	0.98	-----
-----	-----	-----	-----	-----	0.98
-----	-----	-----	-----	0.98	-----
-----	-----	-----	-----	-----	0.98
-----	-----	-----	-----	0.98	-----
-----	0.0265	-----	-----	-----	0.98
-----	-----	-----	-----	0.98	-----
-----	-----	-----	-----	-----	0.98
-----	-----	-----	-----	0.98	-----
-----	0.0272	-----	-----	-----	-----
-----	-----	-----	-----	-----	0.98
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	0.98	-----
-----	-----	-----	-----	-----	0.98
-----	0.0246	-----	-----	-----	-----
-----	-----	-----	-----	0.98	-----
-----	-----	-----	-----	-----	0.98
-----	-----	-----	-----	0.98	-----
-----	0.0257	-----	-----	-----	-----
-----	-----	-----	-----	-----	0.98
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	0.98	-----
-----	-----	-----	-----	-----	0.98
-----	0.0244	-----	-----	0.98	-----
-----	-----	-----	-----	-----	0.98
0.1382	-----	-----	6.912	-----	-----
-----	-----	-----	-----	-----	0.98
-----	-----	3.200	-----	0.98	-----
-----	0.0255	-----	-----	-----	-----
-----	-----	-----	-----	-----	0.98
0.2114	-----	-----	3.648	-----	-----
-----	0.0255	-----	-----	-----	-----
-----	-----	-----	-----	-----	0.98
-----	0.0248	-----	-----	-----	-----
-----	-----	-----	-----	-----	1.18

2

AFF- 10
JP-4 SHALE; VARIABLE NOX
1980 JULY 2-3

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PAN PPM ECD-3	SIDE 2 PAN PPM ECD-3	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023	SIDE PART TSI-
1 658	-199	0.000	0.000	-----	-----	334.	334.	34
1 840	-97	-----	-----	0.000	0.000	-----	-----	---
1 920	-57	0.000	-----	-----	-----	334.	-----	69
1 959	-18	-----	0.000	-----	-----	-----	501.	---
1 1105	48	0.000	-----	-----	-----	1002.	-----	---
1 1115	58	-----	0.000	-----	-----	-----	2338.	---
1 1205	108	0.001	-----	-----	-----	668.	-----	34
1 1215	118	-----	0.002	-----	-----	-----	1336.	---
1 1250	153	-----	-----	0.023	-----	-----	-----	---
1 1305	168	0.001	-----	-----	-----	501.	-----	78
1 1315	178	-----	0.005	-----	-----	-----	0.	---
1 1335	198	-----	-----	-----	0.021	-----	-----	---
1 1405	228	0.005	-----	-----	-----	835.	-----	78
1 1415	238	-----	0.011	-----	-----	-----	2171.	---
1 1505	288	0.010	-----	-----	-----	1837.	-----	60
1 1515	298	-----	0.018	-----	-----	-----	1670.	---
1 1532	315	-----	-----	0.031	-----	-----	-----	---
1 1605	348	0.015	-----	-----	-----	1336.	-----	52
1 1615	358	-----	0.021	-----	-----	-----	1837.	---
1 1632	375	-----	-----	-----	0.036	-----	-----	---
2 805	1308	-----	-----	-----	-----	1169.	-----	8
2 815	1318	-----	0.002	-----	-----	-----	835.	---
2 905	1368	0.008	-----	-----	-----	835.	-----	52
2 915	1378	-----	0.003	-----	-----	-----	1002.	---
2 1005	1428	0.008	-----	-----	-----	2171.	-----	78
2 1015	1438	-----	0.005	-----	-----	-----	3006.	---
2 1105	1488	0.010	-----	-----	-----	1670.	-----	34
2 1115	1498	-----	0.005	-----	-----	-----	668.	---
2 1205	1548	0.009	-----	-----	-----	835.	-----	52
2 1215	1558	-----	0.004	-----	-----	-----	2338.	---
2 1305	1608	0.009	-----	-----	-----	1002.	-----	95
2 1315	1618	-----	0.004	-----	-----	-----	1837.	---
2 1405	1668	0.009	-----	-----	-----	3006.	-----	11
2 1415	1678	-----	0.003	-----	-----	-----	2672.	---
2 1515	1738	-----	0.003	-----	-----	-----	4509.	---
2 1605	1788	-----	0.006	-----	-----	-----	3841.	---

----- NO DATA TAKEN

	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023	SIDE 1 PART.042 PART/CC TSI-023	SIDE 2 PART.042 PART/CC TSI-023	SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023
2	334.	334.	348.	348.	178.	178.
0	334.		696.		89.	
		501.		87.		178.
	1002.		0.		266.	
		2338.		2175.		2708.
	668.		348.		3241.	
		1336.		348.		3374.
	501.		783.		977.	
		0.		1131.		577.
021	835.		783.		1954.	
		2171.		435.		666.
	1837.		609.		400.	
		1670.		522.		533.
	1336.		522.		400.	
		1837.		696.		533.
036						
	1169.		87.		533.	
		835.		174.		444.
	835.		522.		622.	
		1002.		348.		1288.
	2171.		783.		932.	
		3006.		=56550		3.0E 04
	1670.		348.		1154.	
		668.		870.		1288.
	835.		522.		932.	
		2338.		435.		1243.
	1002.		957.		710.	
		1837.		261.		710.
	3006.		1131.		1465.	
		2672.		1218.		1687.
		4509.		2610.		5284.
		3841.		3132.		7237.

AFF- 10

JP-4 SHALE; VARIABLE NOX
1980 JULY 2-3

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
		PART.133 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART.237 PART/CC TSI-023	PART.237 PART/CC TSI-023	PART.422 PART/CC TSI-023	PART.422 PART/CC TSI-023	PART.750 PART/CC TSI-023	PART.750 PART/CC TSI-023
1 658	-199	72.	72.	25.	25.	7.	7.	0.	0.
1 920	-57	24.	---	12.	---	0.	---	0.	---
1 959	-18	---	48.	---	12.	---	-7.	---	-7.
1 1105	48	24.	---	12.	---	7.	---	-4.	---
1 1115	58	---	217.	---	49.	---	0.	---	4.
1 1205	108	675.	---	12.	---	0.	---	0.	---
1 1215	118	---	3253.	---	49.	---	7.	---	4.
1 1305	168	2747.	---	148.	---	13.	---	0.	---
1 1315	178	---	4242.	---	763.	---	33.	---	0.
1 1405	228	2386.	---	86.	---	13.	---	4.	---
1 1415	238	---	1783.	---	1464.	---	87.	---	7.
1 1505	288	1181.	---	861.	---	47.	---	-4.	---
1 1515	298	---	699.	---	1218.	---	87.	---	11.
1 1605	348	482.	---	763.	---	47.	---	7.	---
1 1615	358	---	96.	---	824.	---	87.	---	4.
2 805	1308	145.	---	12.	---	7.	---	4.	---
2 815	1318	---	96.	---	25.	---	0.	---	0.
2 905	1368	337.	---	-12.	---	7.	---	0.	---
2 915	1378	---	675.	---	25.	---	0.	---	4.
2 1005	1428	843.	---	49.	---	7.	---	0.	---
2 1015	1438	---	1398.	---	148.	---	13.	---	4.
2 1105	1488	771.	---	135.	---	7.	---	0.	---
2 1115	1498	---	1036.	---	234.	---	7.	---	4.
2 1205	1548	1036.	---	62.	---	0.	---	4.	---
2 1215	1558	---	819.	---	221.	---	13.	---	0.
2 1305	1608	434.	---	111.	---	20.	---	-4.	---
2 1315	1618	---	578.	---	148.	---	-7.	---	-4.
2 1405	1668	723.	---	98.	---	0.	---	0.	---
2 1415	1678	---	916.	---	74.	---	13.	---	-4.
2 1515	1738	---	2121.	---	160.	---	7.	---	4.
2 1605	1788	---	3253.	---	295.	---	0.	---	0.

----- NO DATA TAKEN

AFF- 11
NOX - AIR IRRADIATION (NEW BAG)
1980 JULY 11

0846: BAG FILLED WITH PURE AIR.
0903-1033: AEROSOL LEVELS FOUND TO BE NEGLIGABLE.
0932: INJECTED 4.0 ML. NO2.
0934: INJECTED 17.0 ML. NO.
0953: INJECTED 0.8 ML. PROPANE.
1007: INJECTED 0.8 ML. PROPENE.
1048: BAG UNCOVERED (T=0).
1053: WEATHER: CLEAR AND HOT.

NOTE: NEW BAG (#15) INSTALLED.

RESULTS:

CALC. AVG. OH= $30.8 \times D \text{ LN (PROPANE/PROPENE) / DT} = .076 (+-.003) \text{ PPT}$
CALC. RAD. INPUT = $16.0 \times (\text{AVG.OH}) \times (60 + \text{MIN.AVG.NO2}) = 0.16 \text{ PPB/MIN}$
-D (NO)/DT= $.52 (+-.10) \text{ PPB/MIN}$
AVG. K1 ESTIMATED FROM RADIOM. DATA= $.406 (+-.046) / \text{MIN}$

T=0 AT 1048 PST

BAG NO. 15 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
TS	DORIC-1	39.2	2.9	DEG C
UV RAD	EPPLEY	3.92	0.45	MW/CM2

53

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.485	PPM
NO2-UNC	B-NOX-1	0.124	PPM
PROPANE	DMS-1	0.1840	PPM
PROPENE	DMS-1	0.1780	PPM

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
4300	TSI 023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4400	MRI 388	MRI INTEGRATING NEPHELOMETER MD:1550B
4900	B-03-1	BENDIX O3 ANALYZER MD5513340-X SN32787-5
1790	D-1790	DASIBI 1790 OZONE MONITOR
4850	BK6800-1	BECKMAN HYDROCARBON GC MD 6800 SN100015D
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600; FID
2100	PN-1	RM 121; POROPAK N ; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE; FID
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038-2
4350	CLIMET	CLIMET OPC MD:208 SN76-148
4130	EPPLEY	ARB LAB; EPPLEY 11692 UV RADIOMETER

AFF- 11
NOX - AIR IRRADIATION (NEW BAG)
1980 JULY 11

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM B-03-1	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	PROPANE PPM DMS-1	PROPEL PPM DMS-1
1 850	-118	-----	-----	-----	-----	-----	0.0045	0.00
1 903	-105	0.003	-0.001	0.025	0.010	0.033	-----	-----
1 1026	-22	-----	-----	-----	-----	-----	0.0183	0.01
1 1033	-15	0.003	-0.003	0.485	0.124	0.605	-----	-----
1 1038	-10	-----	-----	-----	-----	-----	0.0184	0.01
1 1100	12	-----	-----	-----	-----	-----	-----	-----
1 1103	15	0.002	0.000	0.453	0.127	0.575	0.0198	0.01
1 1115	27	-----	-----	-----	-----	-----	-----	-----
1 1118	30	0.002	-0.001	0.437	0.127	0.555	0.0201	0.01
1 1130	42	-----	-----	-----	-----	-----	-----	-----
1 1133	45	0.003	0.000	0.430	0.123	0.545	0.0195	0.01
1 1145	57	-----	-----	-----	-----	-----	-----	-----
1 1148	60	0.003	-0.001	0.447	0.130	0.570	0.0199	0.01
1 1200	72	-----	-----	-----	-----	-----	-----	-----
1 1203	75	0.003	0.000	0.420	0.130	0.540	0.0196	0.01
1 1215	87	-----	-----	-----	-----	-----	-----	-----
1 1218	90	0.003	0.000	0.410	0.133	0.535	0.0196	0.01
1 1230	102	-----	-----	-----	-----	-----	-----	-----
1 1233	105	0.004	0.000	0.402	0.139	0.530	0.0196	0.01
1 1245	117	-----	-----	-----	-----	-----	-----	-----
1 1248	120	0.003	0.000	0.393	0.144	0.525	0.0198	0.01

54

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	AER.N PART/CC TSI 023	AER.S UM2/CC TSI 023	CO PPM BK6800-1	THC PPMC BK6800-1	PART.024 PART/CC TSI 023	PART.042 PART/CC TSI 023	PART. PART/ TSI 0
1 903	-105	3.5E 04	577.	2.16	2.73	1.9E 04	5394.	6083
1 1033	-15	1.1E 04	145.	2.16	2.64	6680.	1305.	1510
1 1103	15	-----	-----	2.47	2.64	-----	-----	-----
1 1118	30	-----	-----	2.67	2.64	-----	-----	-----
1 1133	45	-----	-----	2.88	2.64	-----	-----	-----
1 1148	60	-----	-----	2.88	2.73	-----	-----	-----
1 1203	75	-----	-----	3.19	2.64	-----	-----	-----
1 1218	90	-----	-----	3.29	2.64	-----	-----	-----
1 1233	105	-----	-----	3.50	2.73	-----	-----	-----
1 1248	120	-----	-----	3.60	2.69	-----	-----	-----

----- NO DATA TAKEN

NOTES

A K1 CALCULATED FROM UV RADIOMETER DATA

NOX-UNC PPM B-NOX-1	PROPANE PPM DMS-1	PROPENE PPM DMS-1	LNC3/C3=	TS DEG C DORIC-1	UV RAD MW/CM2 EPPLEY	AER.V UM3/CC TSI 023
-----	0.0045	0.0017	-----	-----	-----	-----
0.033	-----	-----	-----	34.1	-----	18.
-----	0.0183	0.0178	0.0277	-----	-----	-----
0.605	-----	-----	-----	35.5	-----	4.
-----	0.0184	0.0178	0.0332	-----	-----	-----
-----	-----	-----	-----	-----	3.92	-----
0.575	0.0198	0.0186	0.0625	37.0	-----	-----
-----	-----	-----	-----	-----	3.90	-----
0.555	0.0201	0.0181	0.1048	38.5	-----	-----
-----	-----	-----	-----	-----	3.54	-----
0.545	0.0195	0.0170	0.1372	40.0	-----	-----
-----	-----	-----	-----	-----	4.64	-----
0.570	0.0199	0.0169	0.1634	40.2	-----	-----
-----	-----	-----	-----	-----	3.70	-----
0.540	0.0196	0.0155	0.2347	41.0	-----	-----
-----	-----	-----	-----	-----	4.44	-----
0.535	0.0196	0.0153	0.2477	41.5	-----	-----
-----	-----	-----	-----	-----	3.99	-----
0.530	0.0196	0.0148	0.2809	41.9	-----	-----
-----	-----	-----	-----	-----	3.25	-----
0.525	0.0190	0.0142	0.3324	42.8	-----	-----

PART.024 PART/CC TSI 023	PART.042 PART/CC TSI 023	PART.075 PART/CC TSI 023	PART.133 PART/CC TSI 023	PART.237 PART/CC TSI 023	PART.422 PART/CC TSI 023	PART.750 PART/CC TSI 023
-----	-----	-----	-----	-----	-----	-----
1.9E 04	5394.	6083.	3808.	652.	87.	18.
6680.	1305.	1510.	1012.	172.	0.	7.
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----

AFF- 12
OZONE DECAY
1980 JUL 11-12

1530: INJECTED 2 LITERS OF 2.5% OZONE IN AIR (SIDE 2)
1538: BAG FILLED WITH PURE AIR.
1540: INJECTED ANOTHER 2 LITERS OF 2.5% OZONE IN AIR (SIDE 2).
1405: BAG DIVIDED.

NOTE: ONLY SIDE 2 WAS MONITORED.

RESULTS:

OZONE DECAY RATE= 1.6 %/HR

T=0 AT 1558 PST

BAG NO. 15 USED

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX NOX ANALYZER MDB101BX SN300038-2

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1
1 1558	0	1.960	0.047	0.072	0.112
2 1522	1404	1.345	0.041	0.042	0.078

----- NO DATA TAKEN

AFF- 13
PROPENE - NOX CONDITIONING
1980 JULY 15

0735: BAG FILLED WITH PURE AIR.
0750-0805: 20 ML NO2, 20 ML NO, AND 40 ML PROPENE INJECTED
0900: BAG UNCOVERED.
1310: CHAMP STATION AIR CONDITIONER POWER OFF.

T=0 AT 820 PST

BAG NO. 15 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
UV RAD	EPPLEY	3.15	0.58	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.502	PPM
NO2-UNC	B-NOX-1	0.515	PPM
PROPENE	DMS-1	0.850	PPM

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
2200	DMS-1	RM-121; DIMETHYLSULFOLANE; FID
2100	PN-1	RM 121; POROPAK N ; FID
4900	B-03-1	BENDIX O3 ANALYZER MD5513340-X SN32787-5
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038-2
4130	EPPLEY	ARB LAB; EPPLEY 11692 UV RADIOMETER

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM B-03-1	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	PROPENE PPM DMS-1	UV RAD MW/CM2 EPPLEY
1 820	0	-----	-----	-----	-----	-----	0.850	-----
1 830	10	-----	-----	-----	-----	-----	-----	-----
1 856	36	0.001	-0.003	0.502 A	0.515 A	0.990 A	-----	-----
1 1030	130	-----	-----	-----	-----	-----	-----	3.15
1 1230	250	-----	-----	-----	-----	-----	-----	3.97
1 1330	310	-----	-----	-----	-----	-----	-----	2.85
1 1500	400	-----	1.145	0.170 A	0.306 A	0.460 A	0.001	2.64

----- NO DATA TAKEN

NOTES

A NOX VALUES PROBABLY INCORRECT DUE TO TEMPERATURE RISE IN CHAMP STATION.

AFF- 14
PURE AIR PHOTOLYSIS
1980 JULY 16

0755: BAG FILLED WITH PURE AIR.
0820: BAG DIVIDED.
0835: BAG UNCOVERED.

RESULTS:

OZONE FORMATION RATES: (900-1515 PST)

SIDE 1: 14.9 PPB/HR
SIDE 2: 24.0 PPB/HR

T=0 AT 835 PST

BAG NO. 15 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	40.4	5.2	DEG C	SIDE 1
T	DORIC-1	41.2	5.1	DEG C	SIDE 2
UV RAD	EPPLEY	3.36	0.54	MW/CM2	

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
4900	B-03-1	BENDIX O3 ANALYZER MD5513340-X SN32787-5
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX NOX ANALYZER MDB101BX SN300038-2
4850	BK6800-1	BECKMAN HYDROCARBON GC MD 6800 SN100015D
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479
4130	EPPLEY	ARB LAB; EPPLEY 11692 UV RADIOMETER

AFF- 14
 PURE AIR PHOTOLYSIS
 1980 JULY 16

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 OZONE PPM B-03-1	SIDE 1 OZONE PPM D-1790	SIDE 2 OZONE PPM B-03-1	SIDE 2 OZONE PPM D-1790	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SIDE 1 NO2-UNC PPM B-NOX-1
1 825	-10	0.006	0.000	0.006	0.000	0.000 A	0.000 A	0.012
1 905	30	0.014	0.009	-----	-----	0.000	-----	0.012
1 915	40	-----	-----	0.016	0.010	-----	0.000	-----
1 1005	90	0.027	0.024	-----	-----	0.000	-----	0.032
1 1015	100	-----	-----	0.035	0.034	-----	-----	-----
1 1105	150	0.041	0.043	-----	-----	-----	-----	-----
1 1115	160	-----	-----	0.049	0.043	-----	-----	-----
1 1205	210	0.052	0.052	-----	-----	-----	-----	-----
1 1215	220	-----	-----	0.067	0.069	-----	-----	-----
1 1305	270	0.062	0.061	-----	-----	-----	-----	-----
1 1315	280	-----	-----	0.086	0.087	-----	-----	-----
1 1405	330	0.085	0.084	-----	-----	-----	-----	-----
1 1415	340	-----	-----	0.105	0.112	-----	-----	-----
1 1505	390	0.126	0.097	-----	-----	-----	-----	-----
1 1515	400	-----	-----	0.161	0.160	-----	-----	-----

----- NO DATA TAKEN

11 NOV 1981

PAGE 2

	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
	NO	NO	NO2-UNC	NO2-UNC	NOX-UNC	NOX-UNC
	PPM	PPM	PPM	PPM	PPM	PPM
	B-NOX-1	B-NOX-1	B-NOX-1	B-NOX-1	B-NOX-1	B-NOX-1
0	0.000 A	0.000 A	0.012 A	0.012 A	0.000 A	0.000 A
-	0.000	-----	0.012	-----	0.000	-----
0	-----	0.000	-----	0.012	-----	0.000
-	0.000	-----	0.032	-----	0.002	-----
4	-----	-----	-----	-----	-----	-----
-	-----	-----	-----	-----	-----	-----
3	-----	-----	-----	-----	-----	-----
-	-----	-----	-----	-----	-----	-----
9	-----	-----	-----	-----	-----	-----
-	-----	-----	-----	-----	-----	-----
7	-----	-----	-----	-----	-----	-----
-	-----	-----	-----	-----	-----	-----
2	-----	-----	-----	-----	-----	-----
-	-----	-----	-----	-----	-----	-----
0	-----	-----	-----	-----	-----	-----

2

AFF- 14
PURE AIR PHOTOLYSIS
1980 JULY 16

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	SIDE 1 THC PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1	UV RAD MW/CM2 EPPLEY	SIDE 1 CO PPH BK6800-1	SIDE 2 CO PPH BK6800-1
1 825	-10	31.5	31.5	0.12	0.12	-----	0.31	0.31
1 830	-5	-----	-----	-----	-----	-----	-----	-----
1 900	25	-----	-----	-----	-----	2.68	-----	-----
1 905	30	33.3	-----	0.13	-----	-----	0.29	-----
1 915	40	-----	35.9	-----	0.09	-----	-----	0.31
1 930	55	-----	-----	-----	-----	3.05	-----	-----
1 1000	85	-----	-----	-----	-----	2.98	-----	-----
1 1005	90	40.0	-----	0.14	-----	-----	0.31	-----
1 1015	100	-----	41.6	-----	0.14	-----	-----	0.31
1 1030	115	-----	-----	-----	-----	3.07	-----	-----
1 1100	145	-----	-----	-----	-----	4.37	-----	-----
1 1105	150	42.8	-----	0.05	-----	-----	0.31	-----
1 1115	160	-----	45.0	-----	0.05	-----	-----	0.30
1 1130	175	-----	-----	-----	-----	4.04	-----	-----
1 1200	205	-----	-----	-----	-----	3.92	-----	-----
1 1205	210	43.7	-----	0.14	-----	-----	0.33	-----
1 1215	220	-----	45.2	-----	0.14	-----	-----	0.35
1 1230	235	-----	-----	-----	-----	3.53	-----	-----
1 1300	265	-----	-----	-----	-----	3.91	-----	-----
1 1305	270	44.5	-----	0.13	-----	-----	0.32	-----
1 1315	280	-----	46.0	-----	0.14	-----	-----	0.37
1 1330	295	-----	-----	-----	-----	2.77	-----	-----
1 1400	325	-----	-----	-----	-----	3.77	-----	-----
1 1405	330	45.0	-----	0.14	-----	-----	0.36	-----
1 1415	340	-----	43.0	-----	0.15	-----	-----	0.40
1 1430	355	-----	-----	-----	-----	2.91	-----	-----
1 1500	385	-----	-----	-----	-----	2.98	-----	-----
1 1505	390	42.5	-----	0.14	-----	-----	0.38	-----
1 1515	400	-----	41.5	-----	0.06	-----	-----	0.40
1 1530	415	-----	-----	-----	-----	3.07	-----	-----

----- NO DATA TAKEN

NOTES

A BENDIX NOX ANALYZER WILL NOT ZERO CORRECTLY

AFF- 15

PROPENE/NOX CONDITIONING
1980 JUL 17-18

DAY 1 (JULY 17)

1032: BAG FILLED WITH PURE AIR.

1044: INJECTED 20.0 ML. NO₂.

1046: INJECTED 20.0 ML. NO.

1048: INJECTED 40.0 ML. PROPENE.

NOTE: BENDIX APPEARS TO BE OUT OF CALIBRATION.

1101: BAG UNCOVERED (T=0).

(BAG REMAINED UNCOVERED OVERNIGHT)

T=0 AT 1202 PST

BAG NO. 16 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	32.4	8.1	DEG C
UV RAD	EPPLEY	2.79	0.65	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.202	PPM
NO2-UNC	B-NOX-1	0.221	PPM

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
4900	B-03-1	BENDIX O3 ANALYZER MD5513340-X SN32787-5
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038-2
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600; FID
2100	PN-1	RM 121; POROPAK N ; FID
4130	EPPLEY	ARB LAB; EPPLEY 11692 UV RADIOMETER

AFF- 15
PROPENE/NOX CONDITIONING
1980 JUL 17-18

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM B-03-1	OZONE PPM D-1790	NO PPM R-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY
1 1100	-62	-----	-----	-----	-----	-----	-----	-----
1 1130	-32	-----	-----	-----	-----	-----	-----	-----
1 1200	-2	-----	-----	-----	-----	-----	-----	-----
1 1202	0	0.000	0.001	0.202	0.221	0.444	35.5	-----
1 1230	28	-----	-----	-----	-----	-----	-----	3.22
1 1300	58	-----	-----	-----	-----	-----	-----	3.82
1 1330	88	-----	-----	-----	-----	-----	-----	3.44
1 1400	118	-----	-----	-----	-----	-----	-----	3.11
1 1430	148	-----	-----	-----	-----	-----	-----	3.32
1 1500	178	-----	-----	-----	-----	-----	-----	2.85
1 1530	208	-----	-----	-----	-----	-----	-----	2.50
1 1555	233	0.578	0.850	0.010	0.198	0.243	38.5	-----
1 1600	238	-----	-----	-----	-----	-----	-----	2.36
1 1630	268	-----	-----	-----	-----	-----	-----	2.20
2 700	1138	-----	-----	-----	-----	-----	-----	1.78
2 724	1162	0.335	0.512	0.000	0.128	0.137	23.3	-----
2 730	1168	-----	-----	-----	-----	-----	-----	2.04

----- NO DATA TAKEN

AFF- 16

OZONE CONDITIONING
1980 JUL 18-21

DAY 1 (JULY 18)

1034: BAG FILLED WITH PURE AIR.

1145: INJECTED 2 LITERS OF 2.5% OZONE IN AIR.

1155:

1205:

NOTE: BAG REMAINED COVERED THROUGHOUT EXPERIMENT.

RESULTS	DAY 1	DAY 1-DAY 4
-----	-----	-----
OZONE DECAY RATE (%/HR)	1.1	1.2

T=0 AT 1218 PST

BAG NO. 16 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	31.4	7.4	DEG C

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
4900	B-03-1	BENDIX O3 ANALYZER MD5513340-X SN32787-5
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038-2
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM B-03-1	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	T DEG C DORIC-1
1 1056	-82	0.046	0.049	0.008 A	0.012 A	0.020 A	34.2
1 1218	0	3.017	2.991	0.004	0.030	0.033	36.1
1 1550	212	-----	2.879	-----	-----	-----	35.0
4 715	4017	-----	1.334	-----	-----	-----	20.4

----- NO DATA TAKEN

NOTES

A BENDIX NOX BOX IS NOT CALIBRATED.

AFF- 17
PURE AIR PHOTOLYSIS
1980 JUL 21

0949: BAG FILLED WITH PURE AIR.
1003: BAG DIVIDED.
1025: BAG UNCOVERED.
1530: RUN OVER

RESULTS:

NO SIGNIFICANT AEROSOL FORMATION OBSERVED.

OZONE FORMATION RATES (1025-1515 PST)

SIDE 1 9.2 PPB/HR
SIDE 2 7.7 PPB/HR

I=0 AT 1025 PST

BAG NO. 16 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	35.2	4.4	DEG C	SIDE 1
T	DORIC-1	35.7	4.4	DEG C	SIDE 2
UV RAD	EPPLEY	3.07	0.42	MW/CM2	

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4900	B-03-1	BENDIX O3 ANALYZER MD5513340-X SN327811-5
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038-2
4850	BK6800-1	BECKMAN HYDROCARBON GC MD 6800 SN100015D
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479
4300	TSI 023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4400	MRI 388	MRI INTEGRATING NEPHELOMETER MD:1550B
4350	CLIMET	CLIMET OFC MD:208 SN76-148
4130	EPPLEY	ARB LAB; EPPLEY 11692 UV RADIOMETER

AFF- 17

PURE AIR PHOTOLYSIS
1980 JUL 21

CLOCK TIME	ELAPSED TIME	SIDE 1 OZONE PPM	SIDE 1 OZONE PPM	SIDE 2 OZONE PPM	SIDE 2 OZONE PPM	SIDE 1 NO PPM	SIDE 2 NO PPM	SIDE 1 NO2-UN PPM
DY HR.	(MIN)	D-1790	B-03-1	D-1790	B-03-1	B-NOX-1	B-NOX-1	B-NOX-1
1 1015	-10	-0.003	0.009	-0.003	0.009	-----	A	-----
1 1105	40	0.031	0.012	-----	-----	-----	-----	-----
1 1115	50	-----	-----	0.033	0.014	-----	-----	-----
1 1305	160	0.025	0.025	-----	-----	-----	-----	-----
1 1315	170	-----	-----	0.033	0.028	-----	-----	-----
1 1505	280	0.043	0.041	-----	-----	0.018	-----	0.01
1 1515	290	-----	-----	0.037	0.043	-----	0.013	-----

CLOCK TIME	ELAPSED TIME	SIDE 1 DEG C	SIDE 2 DEG C	SIDE 1 PPMC	SIDE 2 PPMC	UV RAL MW/CM2 EPPLEY	SIDE 1 AER.V UM3/CC	SIDE 2 AER.V UM3/CC
DY HR.	(MIN)	DORIC-1	DORIC-1	BK6800-1	BK6800-1	EPPLEY	TSI 023	TSI 023
1 1012	-13	-----	-----	-----	-----	-----	1.	1.
1 1015	-10	29.9	29.9	3.24	3.24	-----	-----	-----
1 1030	5	-----	-----	-----	-----	3.20	-----	-----
1 1100	35	-----	-----	-----	-----	3.40	-----	-----
1 1105	40	33.6	-----	2.92	-----	-----	-1.	-----
1 1115	50	-----	35.0	-----	2.97	-----	-----	1.
1 1130	65	-----	-----	-----	-----	3.83	-----	-----
1 1200	95	-----	-----	-----	-----	3.11	-----	-----
1 1230	125	-----	-----	-----	-----	3.39	-----	-----
1 1300	155	-----	-----	-----	-----	2.96	-----	-----
1 1305	160	39.8	-----	3.03	-----	-----	1.	-----
1 1315	170	-----	39.9	-----	3.04	-----	-----	0.
1 1330	185	-----	-----	-----	-----	2.62	-----	-----
1 1400	215	-----	-----	-----	-----	3.12	-----	-----
1 1430	245	-----	-----	-----	-----	2.45	-----	-----
1 1500	275	-----	-----	-----	-----	2.62	-----	-----
1 1505	280	37.6	-----	2.95	-----	-----	0.	-----
1 1515	290	-----	38.0	-----	2.93	-----	-----	1.

----- NO DATA TAKEN

IDE 2 ZONE PPM	SIDE 1 NO PPM	SIDE 2 NO PPM	SIDE 1 NO2-UNC PPM	SIDE 2 NO2-UNC PPM	SIDE 1 NOX-UNC PPM	SIDE 2 NOX-UNC PPM
-03-1	B-NOX-1	B-NOX-1	B-NOX-1	B-NOX-1	B-NOX-1	B-NOX-1
0.009	----- A	----- A	----- A	----- A	----- A	----- A
0.014	-----	-----	-----	-----	-----	-----
0.028	-----	-----	-----	-----	-----	-----
0.043	0.018	0.013	0.011	0.004	0.022	0.018

IDE 2 THE PPMC	UV RAD MW/CM2 EPFLEY	SIDE 1 AER.V UM3/CC TSI 023	SIDE 2 AER.V UM3/CC TSI 023	SIDE 1 AER.N PART/CC TSI 023	SIDE 2 AER.N PART/CC TSI 023	SIDE 1 AER.S UM2/CC TSI 023	SIDE 2 AER.S UM2/CC TSI 023
8.24	-----	1.	1.	777.	777.	11.	11.
	3.20	-----	-----	-----	-----	-----	-----
	3.40	-----	-----	-----	-----	-----	-----
9.97	-----	-1.	1.	-254.	-91.	-13.	3.
	3.83	-----	-----	-----	-----	-----	-----
	3.11	-----	-----	-----	-----	-----	-----
	3.39	-----	-----	-----	-----	-----	-----
	2.96	-----	-----	-----	-----	-----	-----
10.04	-----	1.	0.	-113.	79.	13.	11.
	2.62	-----	-----	-----	-----	-----	-----
	3.12	-----	-----	-----	-----	-----	-----
	2.45	-----	-----	-----	-----	-----	-----
	2.62	-----	-----	-----	-----	-----	-----
11.93	-----	0.	1.	-91.	-87.	6.	8.

AFF- 17
PURE AIR PHOTOLYSIS
1980 JUL 21

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 CO PPH BK6800-1	SIDE 2 CO PPH BK6800-1	SIDE 1 PART.024 PART/CC TSI 023	SIDE 2 PART.024 PART/CC TSI 023	SIDE 1 PART.042 PART/CC TSI 023	SIDE 2 PART.042 PART/CC TSI 023	SIDE 1 PART.075 PART/CC TSI 023
1 1012	-13	-----	-----	334.	334.	261.	261.	89.
1 1015	-10	1.86	1.86	-----	-----	-----	-----	-----
1 1105	40	2.09	-----	-167.	-----	0.	-----	-89.
1 1115	50	-----	2.14	-----	-167.	-----	174.	-----
1 1305	160	2.33	-----	-167.	-----	-87.	-----	89.
1 1315	170	-----	2.39	-----	0.	-----	0.	-----
1 1505	280	2.45	-----	-167.	-----	87.	-----	0.
1 1515	290	-----	2.41	-----	0.	-----	-174.	-----

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.237 PART/CC TSI 023	SIDE 2 PART.237 PART/CC TSI 023	SIDE 1 PART.422 PART/CC TSI 023	SIDE 2 PART.422 PART/CC TSI 023	SIDE 1 PART.750 PART/CC TSI 023	SIDE 2 PART.750 PART/CC TSI 023
1 1012	-13	0.	0.	-7.	-7.	4.	4.
1 1105	40	-12.	-----	-7.	-----	-4.	-----
1 1115	50	-----	-12.	-----	0.	-----	4.
1 1305	160	25.	-----	0.	-----	4.	-----
1 1315	170	-----	25.	-----	7.	-----	0.
1 1505	280	0.	-----	13.	-----	0.	-----
1 1515	290	-----	-12.	-----	7.	-----	4.

----- NO DATA TAKEN

NOTES

- A BENDIX NOX ANALYZER WAS CALIBRATED DURING THE FIRST PART OF THE RUN.
- B WHITBY ELECTRIC AEROSOL ANALYZER PROBABLY NOT FUNCTIONING CORRECTLY THROUGHOUT RUN

SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
RT.024	PART.042	PART.042	PART.075	PART.075	PART.133	PART.133
RT/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
TSI 023	TSI 023	TSI 023	TSI 023	TSI 023	TSI 023	TSI 023
334.	261.	261.	89.	89.	96.	96.
-----	-----	-----	-----	-----	-----	-----
-----	0.	-----	-89.	-----	24.	-----
167.	-----	174.	-----	-89.	-----	0.
-----	-87.	-----	89.	-----	24.	-----
0.	-----	0.	-----	0.	-----	48.
-----	87.	-----	0.	-----	-24.	-----
0.	-----	-174.	-----	89.	-----	0.

SIDE 2	SIDE 1	SIDE 2
RT.422	PART.750	PART.750
RT/CC	PART/CC	PART/CC
TSI 023	TSI 023	TSI 023
-7.	4.	4.
-----	-4.	-----
0.	-----	4.
-----	4.	-----
7.	-----	0.
-----	0.	-----
7.	-----	4.

ING THE FIRST PART OF THE RUN.
Y NOT FUNCTIONING CORRECTLY

AFF- 18

JP-4 (SHALE); 4-DAY
1980 JUL 22-25

DAY 1 (JULY 22)

0722: BAG FILLED WITH PURE AIR.

WET BULB= 23.5 C, DRY BULB= 26 C, R.H.=81%

0758: 5 ML NO2 INJECTED

0802: 15 ML NO INJECTED

0806: 60 ML FREON 12 AND 740 ML JP-4 (SHALE) ADDED

0843: BAG UNCOVERED.

DAY 2 (JULY 23)

NOTE: PURE AIR ADDED TO FILL BAG. DILUTION FACTOR = 0.58

0715: SOME H2O CONDENSATION NOTED INSIDE BAG WALL

DAY 3 (JULY 24)

NOTE: PURE AIR ADDED TO FILL BAG. DILUTION FACTOR = 0.51

0759: 15 ML NO AND 5 ML NO2 INJECTED.

BAG IS APPROXIMATELY 70% FULL.

DAY 4 (JULY 25)

NOTE: PURE AIR ADDED TO FILL BAG. DILUTION FACTOR = 0.54

ALSO, WHITBY ELECTRIC AEROSOL ANALYZER MALFUNCTION THROUGHOUT RUN.

WEATHER: SMOGGY WEATHER WITH SOME CLOUDS AND HUMIDITY DURING LAST DAY.

RESULTS:	T(DEG.C)	UV(MW/CM2)
DAY 1	40+-4	2.8+--.3
DAY 2	39+-5	2.7+--.9
DAY 3	35+-5	2.0+--.7
DAY 4	38+-7	2.7+--.5

99 T=0 AT 843 PST

BAG NO. 16 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	37.2	5.8	DEG C
UV RAD	EPPLEY-1	2.56	0.69	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.341	PPM
NO2-UNC	B-NOX-1	0.133	PPM
THC	BK6600-1	24.90	PPMC

AFF- 18
JP-4 (SHALE); 4-DAY
1980 JUL 22-25

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4900	B-03-1	BENDIX O3 ANALYZER MD5513340-X SN32787-5
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
2750	SE-52C-2	RM-121; 30M SE-52 QUARTZ CAP. GC; FID
4000	ECD-3	AF-LAB; 12" 5% CARBOWAX-600 GC; ECD
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4130	EPFLEY-1	ARB TRAILER; EPFLEY 11692 UV RADIOMETER

AFF- 18

JP-4 (SHALE); 4-DAY
1980 JUL 22-25

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	OZONE PPM B-03-1	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	THC PPMC BK6800-1	T DE DOR1
1 645	-118	-----	-----	-----	-----	-----	-----	---
1 647	-116	-0.000	0.000	0.001	0.002	0.004	2.29	23
1 825	-18	-----	-----	-----	-----	-----	-----	---
1 827	-16	0.011	0.001	0.341	0.133	0.497	24.90	28
1 900	17	-----	-----	-----	-----	-----	-----	---
1 905	22	-0.017	0.003	0.317	0.159	0.489	28.60	31
1 1005	82	0.022	0.007	0.217	0.238	0.462	28.60	37
1 1030	107	-----	-----	-----	-----	-----	-----	---
1 1100	137	-----	-----	-----	-----	-----	-----	---
1 1105	142	0.015	0.022	0.101	0.350	0.449	27.50	40
1 1200	197	-----	-----	-----	-----	-----	-----	---
1 1203	200	-----	-----	-----	-----	-----	-----	---
1 1205	202	0.146	0.137	0.021	0.400	0.396	26.90	42
1 1300	257	-----	-----	-----	-----	-----	-----	---
1 1305	262	0.443	0.421	0.012	0.314	0.309	25.80	43
1 1400	317	-----	-----	-----	-----	-----	-----	---
1 1405	322	0.702	0.670	0.012	0.197	0.197	24.30	44
1 1500	377	-----	-----	-----	-----	-----	-----	---
1 1503	380	-----	-----	-----	-----	-----	-----	---
1 1505	382	0.781	0.746	0.011	0.116	0.119	22.80	40
1 1600	437	-----	-----	-----	-----	-----	-----	---
1 1605	442	0.759	0.728	0.012	0.078	0.083	-----	38
2 717	1354	-----	-----	-----	-----	-----	-----	---
2 722	1359	0.513	0.482	0.019	0.033	0.048	21.10	25
2 730	1367	-----	-----	-----	-----	-----	-----	---
2 800	1397	-----	-----	-----	-----	-----	-----	---
2 900	1457	-----	-----	-----	-----	-----	-----	---
2 912	1469	-----	-----	-----	-----	-----	-----	---
2 915	1472	0.255	0.260	0.008	0.024	0.029	13.50	36
2 1000	1517	-----	-----	-----	-----	-----	-----	---
2 1005	1522	0.257	0.262	0.009	0.027	0.031	13.50	38
2 1100	1577	-----	-----	-----	-----	-----	-----	---
2 1105	1582	0.262	0.267	0.011	0.027	0.032	13.40	41
2 1200	1637	-----	-----	-----	-----	-----	-----	---
2 1203	1642	0.270	0.274	0.008	0.027	0.031	13.20	42
2 1300	1697	-----	-----	-----	-----	-----	-----	---
2 1305	1702	0.280	0.277	0.009	0.028	0.031	13.10	42
2 1400	1757	-----	-----	-----	-----	-----	-----	---
2 1405	1762	0.276	0.279	0.008	0.029	0.032	11.60	43
2 1500	1817	-----	-----	-----	-----	-----	-----	---
2 1504	1821	-----	-----	-----	-----	-----	-----	---
2 1505	1822	0.270	0.270	0.012	0.029	0.038	12.70	41
2 1600	1877	-----	-----	-----	-----	-----	-----	---
2 1605	1882	0.265	0.267	0.009	0.027	0.033	12.80	38
3 720	2797	-----	-----	-----	-----	-----	-----	---
3 725	2802	0.168	0.162	0.021	0.022	0.038	14.00	26
3 800	2837	-----	-----	-----	-----	-----	-----	---
3 850	2887	0.008	0.012	0.167	0.313	0.487	6.98	31
3 900	2897	-----	-----	-----	-----	-----	-----	---
3 905	2902	0.010	0.016	0.150	0.330	0.484	6.94	32
3 1000	2957	-----	-----	-----	-----	-----	-----	---

----- NO DATA TAKEN

11 NOV 1981

PAGE 3

NOX-UNC PPM B-NOX-1	THC PPMC BK6800-1	T DEG C DORIC-1	UV RAD MW/CM2 EPFLEY-1	FREON 12 RAW DATA DMS-1	#PART>.3 PART/CC CLIMET	#PART>.5 PART/CC CLIMET
0.004	2.29	23.2		85.38	3.	0.
0.497	24.90	28.0	2.62		2.	0.
0.489	28.60	32.8			2.	0.
0.462	28.60	37.2	3.17		1.	0.
			3.02			
0.449	27.50	40.6			1.	0.
			3.23	84.48		
0.396	26.90	42.9	3.01		1.	0.
0.309	25.80	43.4	2.42		209.	14.
0.197	24.30	42.0	2.61		416.	211.
				84.61		
0.119	22.80	40.8	2.47		441.	266.
0.083		38.2			441.	260.
				83.58		
0.048	21.10	25.9	2.12		44.	8.
			1.98			
			2.32	48.77		
0.029	13.50	36.1			14.	8.
			2.86			
0.031	13.50	38.5	2.80		12.	9.
0.032	13.40	41.2	3.62		21.	8.
0.031	13.20	42.9		46.46	77.	8.
			3.58			
0.031	13.10	42.6	4.09		126.	10.
0.032	11.60	43.0	2.52		132.	11.
				46.08		
0.038	12.70	41.0	1.30		114.	9.
0.033	12.60	38.2			92.	7.
				45.89		
0.038	14.00	26.4	1.81		5.	1.
0.487	6.98	31.1	2.54	23.36	2.	0.
0.484	6.94	32.5	1.72		2.	0.

AFF- 18
 JF-4 (SHALE); 4-DAY
 1980 JUL 22-25

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM U-1790	OZONE PPM B-03-1	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	THC PPMC BK6800-1	T DEG BORIC
3 1005	2962	0.012	0.032	0.084	0.382	0.461	6.74	36.
3 1100	3017	-----	-----	-----	-----	-----	-----	-----
3 1105	3022	0.084	0.080	0.030	0.427	0.437	6.81	39.
3 1200	3077	-----	-----	-----	-----	-----	-----	-----
3 1204	3081	-----	-----	-----	-----	-----	-----	-----
3 1205	3082	0.097	0.099	0.019	0.426	0.418	6.42	34.
3 1300	3137	-----	-----	-----	-----	-----	-----	-----
3 1305	3142	0.219	0.221	0.012	0.395	0.381	6.26	42.
3 1400	3197	-----	-----	-----	-----	-----	-----	-----
3 1405	3202	0.284	0.287	0.016	0.354	0.347	6.27	37.
3 1500	3257	-----	-----	-----	-----	-----	-----	-----
3 1505	3262	0.335	0.338	0.017	0.328	0.321	6.13	37.
3 1600	3317	-----	-----	-----	-----	-----	-----	-----
3 1605	3322	0.387	0.389	0.012	0.299	0.292	6.11	36.
4 720	4237	0.187	0.195	0.012	0.060	0.064	5.56	25.
4 730	4247	-----	-----	-----	-----	-----	-----	-----
4 800	4277	-----	-----	-----	-----	-----	-----	-----
4 848	4325	-----	-----	-----	-----	-----	-----	-----
4 855	4332	0.126	0.129	0.008	0.042	0.042	3.16	32.
4 900	4337	-----	-----	-----	-----	-----	-----	-----
4 1000	4397	-----	-----	-----	-----	-----	-----	-----
4 1005	4402	0.177	0.180	0.004	0.039	0.039	4.02	34.
4 1100	4457	-----	-----	-----	-----	-----	-----	-----
4 1105	4462	0.232	0.234	0.003	0.038	0.038	3.63	40.
4 1200	4517	-----	-----	-----	-----	-----	-----	-----
4 1205	4522	0.287	0.289	0.002	0.040	0.039	3.92	42.
4 1300	4577	-----	-----	-----	-----	-----	-----	-----
4 1305	4582	0.333	0.334	0.000	0.040	0.039	3.68	43.
4 1400	4637	-----	-----	-----	-----	-----	-----	-----
4 1405	4642	0.356	0.358	0.010	0.040	0.042	3.70	43.
4 1500	4697	-----	-----	-----	-----	-----	-----	-----
4 1503	4700	-----	-----	-----	-----	-----	-----	-----
4 1505	4702	0.375	0.370	0.002	0.037	0.037	3.75	41.

----- NO DATA TAKEN

UNC PM OX-1	NOX-UNC FPM B-NOX-1	THC PPMC BK6800-1	T DEG C DORIC-1	UV RAD MW/CM2 EFFLEY-1	FREON 12 RAW DATA DMS-1	#PART>.3 PART/CC CLIMET	#PART>.5 PART/CC CLIMET
.382	0.461	6.74	36.0	----- 3.16	----- -----	2.	0.
.427	0.437	6.81	39.4	----- 1.40	----- -----	2.	0.
.426	0.418	6.42	34.8	----- 2.36	23.10 -----	13.	0.
.395	0.381	6.26	42.4	----- 0.92	----- -----	21.	0.
.354	0.347	6.27	37.4	----- 2.17	----- -----	19.	4.
.328	0.321	6.13	37.0	----- 1.99	23.65 -----	17.	11.
.299	0.292	6.11	36.9	----- -----	----- -----	17.	10.
.060	0.064	5.56	25.6	----- 1.64	23.39 -----	10.	0.
.042	0.042	3.16	32.1	----- 3.11 2.54	12.69 ----- -----	6.	0.
.039	0.039	4.02	34.3	----- 3.12	----- -----	5.	0.
.038	0.038	3.63	40.2	----- 2.91	----- -----	5.	0.
.040	0.039	3.92	42.4	----- 2.66	12.74 -----	22.	0.
.040	0.039	3.68	43.8	----- 3.23	----- -----	62.	1.
.040	0.042	3.70	43.6	----- 2.40	----- -----	86.	2.
.037	0.037	3.75	41.8	----- -----	12.70 -----	97.	3.

AFF- 18

JP-4 (SHALE); 4-DAY
1980 JUL 22-25

CLOCK	ELAPSED	#PART>1	BSCAT	N-C4	C5-1SDMS	I-C5	N-C5	CYCL-C
TIME	TIME	PART/CC	10-4 M-1	PPM	PPM	PPM	PPM	PPM
BY HR.	(MIN)	CLIMET	MRI-388	DMS-1	SE-52C-2	DMS-1	DMS-1	DMS-1
1 645	-118	-----	-----	0.0014	-----	0.0005	0.0002	-----
1 647	-116	0.	0.2	-----	-----	-----	-----	-----
1 747	-56	-----	-----	-----	0.0010	-----	-----	-----
1 823	-20	-----	-----	-----	0.0247	-----	-----	-----
1 825	-18	-----	-----	0.0576	-----	0.0358	0.0445	0.00
1 827	-16	0.	0.2	-----	-----	-----	-----	-----
1 905	22	0.	0.2	-----	-----	-----	-----	-----
1 907	24	-----	-----	-----	0.0235	-----	-----	-----
1 1005	82	0.	0.2	-----	0.0236	-----	-----	-----
1 1105	142	0.	0.2	-----	-----	-----	-----	-----
1 1110	147	-----	-----	-----	0.0235	-----	-----	-----
1 1203	200	-----	-----	0.0564	-----	0.0349	0.0435	0.00
1 1204	201	-----	-----	-----	0.0224	-----	-----	-----
1 1205	202	0.	1.5	-----	-----	-----	-----	-----
1 1304	261	-----	-----	-----	0.0225	-----	-----	-----
1 1305	262	0.	9.7	-----	-----	-----	-----	-----
1 1404	321	-----	-----	-----	0.0225	-----	-----	-----
1 1405	322	15.	21.0	-----	-----	-----	-----	-----
1 1503	380	-----	-----	0.0556	-----	0.0339	0.0419	0.00
1 1504	381	-----	-----	-----	0.0342	-----	-----	-----
1 1505	382	35.	24.0	-----	-----	-----	-----	-----
1 1605	442	33.	22.0	-----	-----	-----	-----	-----
2 717	1354	-----	-----	0.0551	0.0220	0.0339	0.0415	0.00
2 722	1359	0.	0.6	-----	-----	-----	-----	-----
2 912	1469	-----	-----	0.0322	-----	0.0173	0.0235	0.00
2 915	1472	0.	0.3	-----	-----	-----	-----	-----
2 918	1475	-----	-----	-----	0.0157	-----	-----	-----
2 1005	1522	0.	0.3	-----	-----	-----	-----	-----
2 1006	1523	-----	-----	-----	0.0130	-----	-----	-----
2 1105	1582	0.	0.8	-----	0.0127	-----	-----	-----
2 1204	1641	-----	-----	-----	0.0139	-----	-----	-----
2 1205	1642	0.	1.3	0.0302	-----	0.0180	0.0215	0.00
2 1304	1701	-----	-----	-----	0.0123	-----	-----	-----
2 1305	1702	0.	1.5	-----	-----	-----	-----	-----
2 1404	1761	-----	-----	-----	0.0142	-----	-----	-----
2 1405	1762	0.	1.3	-----	-----	-----	-----	-----
2 1504	1821	-----	-----	0.0295 B	-----	0.0178 B	0.0215 B	0.00
2 1505	1822	0.	1.3	-----	0.0120	-----	-----	-----
2 1605	1882	0.	1.2	-----	-----	-----	-----	-----
3 720	2797	-----	-----	0.0303	-----	0.0180	0.0220	0.00
3 722	2799	-----	-----	-----	0.0119	-----	-----	-----
3 725	2802	0.	0.2	-----	-----	-----	-----	-----
3 850	2887	0.	0.2	0.0155	-----	0.0085	0.0104	0.00
3 851	2888	-----	-----	-----	0.0057	-----	-----	-----
3 905	2902	0.	0.2	-----	-----	-----	-----	-----
3 1005	2962	0.	0.2	-----	0.0055	-----	-----	-----
3 1103	3020	-----	-----	-----	0.0067	-----	-----	-----
3 1105	3022	0.	0.2	-----	-----	-----	-----	-----
3 1203	3080	-----	-----	-----	0.0053	-----	-----	-----
3 1204	3081	-----	-----	0.0151	-----	0.0081	0.0102	0.00
3 1205	3082	0.	0.2	-----	-----	-----	-----	-----

----- NO DATA TAKEN

MS	I-C5 PPM DMS-1	N-C5 PPM DMS-1	CYCL-C5 PPM DMS-1	N-C6 PPM DMS-1	N-C6 PPM SE-52C-2	N-C7 PPM SE-52C-2	N-C8 PPM SE-52C-2
2	0.0005	0.0002	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----	-----
6	-----	-----	-----	-----	0.0002	0.0001	0.0006
7	-----	-----	-----	-----	0.0487	0.0291	0.2583
	0.0358	0.0445	0.0041	0.0484	-----	-----	-----
	-----	-----	-----	-----	-----	-----	-----
5	-----	-----	-----	-----	0.0486	0.0294	0.2606
6	-----	-----	-----	-----	0.0490	0.0295	0.2605
	-----	-----	-----	-----	-----	-----	-----
5	-----	-----	-----	-----	0.0482	0.0289	0.2535
	0.0349	0.0435	0.0044	0.0484	-----	-----	-----
4	-----	-----	-----	-----	0.0473	0.0284	0.2498
	-----	-----	-----	-----	-----	-----	-----
5	-----	-----	-----	-----	0.0458	0.0276	0.2404
	-----	-----	-----	-----	-----	-----	-----
5	-----	-----	-----	-----	0.0462	0.0272	0.2337
	0.0339	0.0419	0.0044	0.0456	-----	-----	-----
	-----	-----	-----	-----	0.0452	0.0272	0.2310
	-----	-----	-----	-----	-----	-----	-----
0	0.0339	0.0415	0.0045	0.0442	0.0439	0.0267	0.2242
	-----	-----	-----	-----	-----	-----	-----
	0.0173	0.0235	0.0022	0.0257	-----	-----	-----
	-----	-----	-----	-----	-----	-----	-----
7	-----	-----	-----	-----	0.0255	0.0154	0.1269
	-----	-----	-----	-----	-----	-----	-----
0	-----	-----	-----	-----	0.0292	0.0154	0.1268
7	-----	-----	-----	-----	0.0244	0.0151	0.1248
9	-----	-----	-----	-----	0.0247	0.0152	0.1237
	0.0180	0.0215	0.0022	0.0238	-----	-----	-----
3	-----	-----	-----	-----	0.0236	0.0142	0.1185
	-----	-----	-----	-----	-----	-----	-----
2	-----	-----	-----	-----	0.0242	0.0146	0.1193
	-----	-----	-----	-----	-----	-----	-----
	0.0178 B	0.0215 B	0.0022 B	0.0231 B	-----	-----	-----
0	-----	-----	-----	-----	0.0232	0.0147	0.1086
	-----	-----	-----	-----	-----	-----	-----
	0.0180	0.0220	0.0020	0.0226	-----	-----	-----
9	-----	-----	-----	-----	0.0235	0.0147	0.1163
	-----	-----	-----	-----	-----	-----	-----
	0.0085	0.0104	0.0010	0.0118	-----	-----	-----
7	-----	-----	-----	-----	0.0109	0.0068	0.0551
	-----	-----	-----	-----	-----	-----	-----
5	-----	-----	-----	-----	0.0107	0.0067	0.0529
7	-----	-----	-----	-----	0.0107	0.0067	0.0513
	-----	-----	-----	-----	-----	-----	-----
3	-----	-----	-----	-----	0.0104	0.0065	0.0488
	0.0081	0.0102	0.0010	0.0113	-----	-----	-----
	-----	-----	-----	-----	-----	-----	-----

AFF- 18
JP-4 (SHALE); 4-DAY
1980 JUL 22-25

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	#PART>1 PART/CC CLIMET	BSCAT 10-4 M-1 MRI-388	N-C4 PPM DMS-1	C5-ISOMS PPM SE-52C-2	I-C5 PPM DMS-1	N-C5 PPM DMS-1	CYCL- PPM DMS-
3 1305	3142	0.	0.2	-----	0.0095	-----	-----	-----
3 1404	3201	-----	-----	-----	0.0179	-----	-----	-----
3 1405	3202	0.	0.2	-----	-----	-----	-----	-----
3 1505	3262	0.	0.2	0.0148	-----	0.0078	0.0099	0.00
3 1506	3263	-----	-----	-----	0.0096	-----	-----	-----
3 1605	3322	0.	0.2	-----	-----	-----	-----	-----
4 720	4237	0.	0.2	0.0145	-----	0.0075	0.0095	0.00
4 722	4239	-----	-----	-----	0.0052	-----	-----	-----
4 848	4325	-----	-----	0.0081	-----	0.0039	0.0047	-----
4 850	4327	-----	-----	-----	0.0032	-----	-----	-----
4 855	4332	0.	0.2	-----	-----	-----	-----	-----
4 1004	4401	-----	-----	-----	0.0021	-----	-----	-----
4 1005	4402	0.	0.3	-----	-----	-----	-----	-----
4 1104	4461	-----	-----	-----	0.0027	-----	-----	-----
4 1105	4462	0.	0.8	-----	-----	-----	-----	-----
4 1204	4521	-----	-----	-----	0.0063	-----	-----	-----
4 1205	4522	0.	1.2	0.0078	-----	0.0035	0.0046	0.00
4 1304	4581	-----	-----	-----	0.0015	-----	-----	-----
4 1305	4582	0.	1.3	-----	-----	-----	-----	-----
4 1404	4641	-----	-----	-----	0.0025	-----	-----	-----
4 1405	4642	0.	1.3	-----	-----	-----	-----	-----
4 1503	4700	-----	-----	0.0076	-----	0.0032	0.0041	0.00
4 1504	4701	-----	-----	-----	0.0024	-----	-----	-----
4 1505	4702	0.	1.3	-----	-----	-----	-----	-----

----- NO DATA TAKEN

I-C5 PPM DMS-1	N-C5 PPM DMS-1	CYCL-C5 PPM DMS-1	N-C6 PPM DMS-1	N-C6 PPM SE-52C-2	N-C7 PPM SE-52C-2	N-C8 PPM SE-52C-2
-----	-----	-----	-----	0.0098	0.0062	0.0467
-----	-----	-----	-----	0.0104	0.0063	0.0466
-----	-----	-----	-----	-----	-----	-----
0.0078	0.0099	0.0010	0.0095	-----	-----	-----
-----	-----	-----	-----	0.0100	0.0062	0.0436
-----	-----	-----	-----	-----	-----	-----
0.0075	0.0095	0.0010	0.0097	-----	-----	-----
-----	-----	-----	-----	0.0107	0.0061	0.0418
0.0039	0.0047	-----	0.0068	-----	-----	-----
-----	-----	-----	-----	0.0050	0.0031	0.0214
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	0.0047	0.0029	0.0199
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	0.0045	0.0029	0.0189
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	0.0045	0.0027	0.0177
0.0035	0.0046	0.0006	0.0044	-----	-----	-----
-----	-----	-----	-----	0.0043	0.0026	0.0172
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	0.0040	0.0025	0.0155
-----	-----	-----	-----	-----	-----	-----
0.0032	0.0041	0.0009	0.0042	-----	-----	-----
-----	-----	-----	-----	0.0038	0.0024	0.0148
-----	-----	-----	-----	-----	-----	-----

AFF- 18

JP-4 (SHALE); 4-DAY
1980 JUL 22-25

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	N-C9 PPM SE-52C-2	C10 PPM SE-52C-2	C11 PPM SE-52C-2	C12 RAW DATA SE-52C-2	BENZENE PPM 10'C-600	TOLUENE PPM SE-52C-2	TOLU PP 10'C
1 645	-118	-----	-----	-----	-----	0.0005	-----	0.0
1 647	-116	-----	-----	-----	-----	-----	-----	-----
1 747	-56	0.0001	0.0004	0.0006	0.0312	-----	0.0011	---
1 823	-20	0.0478	0.1069	0.1967	5.119	-----	0.1080	---
1 825	-18	-----	-----	-----	-----	-----	-----	0.0
1 827	-16	-----	-----	-----	-----	-----	-----	---
1 905	22	-----	-----	-----	-----	-----	-----	---
1 907	24	0.0482	0.1073	0.1889	5.339	-----	0.1086	---
1 1005	82	0.0481	0.1070	0.1873	5.365	-----	0.1086	---
1 1105	142	-----	-----	-----	-----	-----	-----	---
1 1110	147	0.0466	0.1033	0.1826	5.429	-----	0.1064	---
1 1203	200	-----	-----	-----	-----	-----	-----	0.0
1 1204	201	0.0458	0.1020	0.1807	5.231	-----	0.1044	---
1 1205	202	-----	-----	-----	-----	-----	-----	---
1 1304	261	0.0442	0.0981	0.1746	5.185	-----	0.1011	---
1 1305	262	-----	-----	-----	-----	-----	-----	---
1 1404	321	0.0418	0.0907	0.1584	4.747	-----	0.0989	---
1 1405	322	-----	-----	-----	-----	-----	-----	---
1 1503	380	-----	-----	-----	-----	-----	-----	0.0
1 1504	381	0.0411	0.0893	0.1567	4.446	-----	0.0986	---
1 1505	382	-----	-----	-----	-----	-----	-----	---
1 1605	442	-----	-----	-----	-----	-----	-----	---
2 717	1354	0.0401	0.0864	0.1394	4.095	-----	0.0957	0.0
2 718	1355	-----	-----	-----	-----	-----	-----	---
2 722	1359	-----	-----	-----	-----	-----	-----	---
2 912	1469	-----	-----	-----	-----	-----	-----	0.0
2 914	1471	-----	-----	-----	-----	-----	-----	---
2 915	1472	-----	-----	-----	-----	-----	-----	---
2 918	1475	0.0229	0.0479	0.0785	2.261	-----	0.0546	---
2 1005	1522	-----	-----	-----	-----	-----	-----	---
2 1006	1523	0.0224	0.0473	0.0810	2.359	-----	0.0534	---
2 1105	1582	0.0222	0.0465	0.0803	2.312	-----	0.0532	---
2 1204	1641	0.0214	0.0457	0.0825	2.283	-----	0.0529	---
2 1205	1642	-----	-----	-----	-----	-----	-----	0.0
2 1304	1701	0.0207	0.0437	0.0741	2.113	-----	0.0508	---
2 1305	1702	-----	-----	-----	-----	-----	-----	---
2 1404	1761	0.0205	0.0439	0.0738	2.073	-----	0.0515	---
2 1405	1762	-----	-----	-----	-----	-----	-----	---
2 1503	1820	-----	-----	-----	-----	-----	-----	---
2 1504	1821	-----	-----	-----	-----	-----	-----	0.0
2 1505	1822	0.0196	0.0413	0.0736	1.762	-----	0.0513	---
2 1605	1882	-----	-----	-----	-----	-----	-----	---
3 720	2797	-----	-----	-----	-----	-----	-----	0.0
3 722	2799	0.0205	0.0442	0.0693	1.590	-----	0.0503	---
3 725	2802	-----	-----	-----	-----	-----	-----	---
3 850	2887	-----	-----	-----	-----	-----	-----	0.0
3 851	2888	0.0094	0.0193	0.0336	0.7918	-----	0.0238	---
3 905	2902	-----	-----	-----	-----	-----	-----	---
3 1005	2962	0.0092	0.0186	0.0324	0.7627	-----	0.0228	---
3 1103	3020	0.0089	0.0181	0.0332	0.7518	-----	0.0225	---
3 1105	3022	-----	-----	-----	-----	-----	-----	---

----- NO DATA TAKEN

11 NOV 1981

PAGE 7

1A -2	BENZENE PPM 10'C-600	TOLUENE PPM SE-52C-2	TOLUENE PPM 10'C-600	124TMEBZ RAW DATA SE-52C-2	M+P-XYL PPM SE-52C-2	CO PPM BK6800-1	PAN PPM ECD-3
-----	0.0005	-----	0.0004	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	2.06	-----
-----	0.0011	-----	-----	528.0	0.0006	-----	0.000
-----	0.1080	-----	-----	1.7E 04	0.0261	-----	0.000
-----	-----	0.0289	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	2.37	-----
-----	-----	-----	-----	-----	-----	2.41	-----
-----	0.1086	-----	-----	1.8E 04	0.0261	-----	0.000
-----	0.1086	-----	-----	1.7E 04	0.0259	2.31	0.000
-----	-----	-----	-----	-----	-----	2.39	0.001
-----	0.1064	-----	-----	1.6E 04	0.0248	-----	-----
-----	-----	0.0306	-----	-----	-----	-----	-----
-----	0.1044	-----	-----	1.4E 04	0.0239	-----	0.002
-----	-----	-----	-----	-----	-----	2.50	-----
-----	0.1011	-----	-----	1.3E 04	0.0227	-----	0.007
-----	-----	-----	-----	-----	-----	2.60	-----
-----	0.0989	-----	-----	1.1E 04	0.0209	-----	0.015
-----	-----	0.0302	-----	-----	-----	2.68	-----
-----	0.0986	-----	-----	1.0E 04	0.0202	-----	0.018
-----	-----	-----	-----	-----	-----	2.71	-----
-----	-----	-----	-----	-----	-----	-----	-----
-----	0.0957	0.0282	-----	1.1E 04	0.0195	-----	-----
-----	-----	-----	-----	-----	-----	-----	0.002
-----	-----	0.0169	-----	-----	-----	2.89	-----
-----	-----	-----	-----	-----	-----	-----	0.002
-----	0.0546	-----	-----	5866.	0.0099	3.17	-----
-----	-----	-----	-----	-----	-----	3.15	-----
-----	0.0534	-----	-----	5740.	0.0105	-----	0.002
-----	0.0532	-----	-----	6146.	0.0103	3.29	0.001
-----	0.0529	-----	-----	5041.	0.0100	-----	0.001
-----	-----	0.0166	-----	-----	-----	3.34	-----
-----	0.0508	-----	-----	3831.	0.0092	-----	0.001
-----	-----	-----	-----	-----	-----	3.40	-----
-----	0.0515	-----	-----	4529.	0.0093	-----	0.001
-----	-----	-----	-----	-----	-----	3.39	-----
-----	-----	0.0166	-----	-----	-----	-----	0.001
-----	0.0513	-----	-----	3368.	0.0089	3.43	-----
-----	-----	-----	-----	-----	-----	3.51	-----
-----	-----	0.0155	-----	-----	-----	-----	-----
-----	0.0503	-----	-----	1906.	0.0093	-----	0.001
-----	-----	-----	-----	-----	-----	3.77	-----
-----	-----	0.0076	-----	-----	-----	3.46	-----
-----	0.0238	-----	-----	1964.	0.0043	-----	0.001
-----	-----	-----	-----	-----	-----	3.46	-----
-----	0.0228	-----	-----	2249.	0.0037	3.51	0.001
-----	0.0225	-----	-----	2113.	0.0038	-----	0.002
-----	-----	-----	-----	-----	-----	3.53	-----

2

AFF- 18
JP-4 (SHALE); 4-DAY
1980 JUL 22-25

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	N-C9 PPM SE-52C-2	C10 PPM SE-52C-2	C11 PPM SE-52C-2	C12 RAW DATA SE-52C-2	BENZENE PPM 10'C-600	TOLUENE PPM SE-52C-2	TOLUE PPM 10'C-
3 1203	3080	0.0084	0.0174	0.0286	0.8042	-----	0.0219	-----
3 1204	3081	-----	-----	-----	-----	-----	-----	0.00
3 1205	3082	-----	-----	-----	-----	-----	-----	-----
3 1305	3142	0.0078	0.0168	0.0262	0.7394	-----	0.0208	-----
3 1404	3201	0.0078	0.0164	0.0251	0.7009	-----	0.0208	-----
3 1405	3202	-----	-----	-----	-----	-----	-----	-----
3 1505	3262	-----	-----	-----	-----	-----	-----	0.00
3 1506	3263	0.0074	0.0156	0.0249	0.6761	-----	0.0207	-----
3 1605	3322	-----	-----	-----	-----	-----	-----	-----
4 720	4237	-----	-----	-----	-----	-----	-----	0.00
4 722	4239	0.0066	0.0138	0.0203	0.5702	-----	0.0195	-----
4 848	4325	-----	-----	-----	-----	-----	-----	0.00
4 850	4327	0.0032	0.0065	0.0105	0.2657	-----	0.0105	-----
4 855	4332	-----	-----	-----	-----	-----	-----	-----
4 1004	4401	0.0031	0.0066	0.0098	0.2840	-----	0.0096	-----
4 1005	4402	-----	-----	-----	-----	-----	-----	-----
4 1104	4461	0.0030	0.0059	0.0088	0.2681	-----	0.0090	-----
4 1105	4462	-----	-----	-----	-----	-----	-----	-----
4 1204	4521	0.0027	0.0053	0.0080	0.2459	-----	0.0085	-----
4 1205	4522	-----	-----	-----	-----	-----	-----	0.00
4 1304	4581	0.0024	0.0051	0.0073	0.2262	-----	0.0081	-----
4 1305	4582	-----	-----	-----	-----	-----	-----	-----
4 1404	4641	0.0022	0.0043	0.0069	0.2053	-----	0.0078	-----
4 1405	4642	-----	-----	-----	-----	-----	-----	-----
4 1503	4700	-----	-----	-----	-----	-----	-----	0.00
4 1504	4701	0.0021	0.0046	0.0063	0.1836	-----	0.0075	-----
4 1505	4702	-----	-----	-----	-----	-----	-----	-----

----- NO DATA TAKEN

BENZENE PPM 10'C-600	TOLUENE PPM SE-52C-2	TOLUENE PPM 10'C-600	124TMEBZ RAW DATA SE-52C-2	M+P-XYL PPM SE-52C-2	CO PPM BK6800-1	PAN PPM ECD-3
-----	0.0219	-----	1408.	0.0035	-----	0.002
-----	-----	0.0074	-----	-----	-----	-----
-----	-----	-----	-----	-----	3.47	-----
-----	0.0208	-----	1644.	0.0032	3.51	0.004
-----	0.0208	-----	1427.	0.0029	-----	0.006
-----	-----	-----	-----	-----	3.54	-----
-----	-----	0.0069	-----	-----	3.56	-----
-----	0.0207	-----	1357.	0.0030	-----	0.009
-----	-----	-----	-----	-----	3.57	-----
-----	-----	0.0067	-----	-----	3.63	-----
-----	0.0195	-----	4992.	0.0027	-----	0.018
-----	-----	0.0036	-----	-----	-----	-----
-----	0.0105	-----	2499.	0.0012	-----	0.009
-----	-----	-----	-----	-----	2.99	-----
-----	0.0096	-----	2918.	0.0012	-----	0.007
-----	-----	-----	-----	-----	3.03	-----
-----	0.0090	-----	2904.	0.0010	-----	0.006
-----	-----	-----	-----	-----	3.03	-----
-----	0.0085	-----	2954.	0.0009	-----	0.004
-----	-----	0.0032	-----	-----	3.10	-----
-----	0.0081	-----	2938.	0.0008	-----	0.004
-----	-----	-----	-----	-----	3.09	-----
-----	0.0078	-----	1911.	0.0007	-----	0.004
-----	-----	-----	-----	-----	3.03	-----
-----	-----	0.0029	-----	-----	-----	-----
-----	0.0075	-----	1462.	0.0006	-----	0.004
-----	-----	-----	-----	-----	3.15	-----

AFF- 18

JP-4 (SHALE); 4-DAY
1980 JUL 22-25

	CLOCK TIME DY HR.	ELAPSED TIME (MIN)	HCHO PPM CA
1	843	0	0.025
1	1330	287	0.056
1	1600	437	0.096
2	814	1411	0.109
2	920	1477	0.092
2	1329	1726	0.079
2	1605	1882	0.090
3	742	2819	0.056
3	923	2920	0.010
3	1240	3117	0.031
3	1405	3202	0.052
4	750	4267	0.065
4	914	4351	0.027
4	1515	4712	0.042

----- NO DATA TAKEN

NOTES

A FACTORS BY RATIO CCHO COLD WATER THAW/HOT WATER THAW
B JUL 23: 1504 DMS SAMPLE NOISY

AFF- 19
JP-4 (SHALE) VS N-BUTANE
1980 JULY 30

0608: BAG FILLED WITH PURE AIR.
0625: WET BULB= 21 C, DRY BULB= 27 C, R.H.= 59%
0638: 5 ML NO2 INJECTED
0640: 16 ML NO INJECTED
0650: 60 ML FREON 12 ADDED
0700: BAG DIVIDED
0717: 125 ML N-C4 INJECTED INTO SIDE 2
0758: 370 MICROLITERS JP-4 (SHALE) INJECTED INTO SIDE 1
0845: BAG UNCOVERED

T=0 AT 845 PSI

BAG NO. 16 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	38.0	6.2	DEG C	SIDE 1
T	DORIC-1	38.8	6.4	DEG C	SIDE 2
UV RAD	EPPLEY-1	2.71	0.47	MW/CM2	

ID	INST.	INITIAL CONC.	UNITS	
NO	BENDIX	0.465	PPM	SIDE 1
NO	BENDIX	0.465	PPM	SIDE 2
NO2-UNC	BENDIX	0.168	PPM	SIDE 1
NO2-UNC	BENDIX	0.162	PPM	SIDE 2
THC	BK6800-2	33.10	PPMC	SIDE 1
THC	BK6800-2	45.10	PPMC	SIDE 2
N-C4	DMS-1	8.6530	PPM	SIDE 2

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
2750	SE-52C-2	RM-121; 30M SE-52 QUARTZ CAP. GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
1790	D-1790	DASI81 1790 OZONE MONITOR
4900	B-03-1	BENDIX O3 ANALYZER MD5513340-X SN32787-5
1700	BENDIX	AF-LAB BENDIX NO-NOX NYLON FILT ANALYZER
1600	BK6800-2	BECKMAN CO,HC ANALYZER SN:100016
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
2000	ECD-1	RM-121; 12" 5% CARBOWAX-400 GC; ECD
4130	EPPLEY-1	ARB TRAILER; EPPLEY 11692 UV RADIOMETER

AFF- 19
JP-4 (SHALE) VS N-BUTANE
1980 JUL 30

CLOCK TIME		ELAPSED TIME	SIDE 1 OZONE PPM D-1790	SIDE 1 OZONE PPM B-03-1	SIDE 2 OZONE PPM D-1790	SIDE 2 OZONE PPM B-03-1	SIDE 1 NO PPM BENDIX	SIDE 2 NO PPM BENDIX
DY	HR.	(MIN)						
1	618	-147	0.003	0.001	0.003	0.001	0.000	0.000
1	745	-60	-----	-----	0.000	0.001	-----	0.468
1	825	-20	0.003	0.001	-----	-----	0.465	-----
1	905	20	0.003	0.003	-----	-----	0.430	-----
1	915	30	-----	-----	0.000	0.003	-----	0.379
1	1005	80	0.007	0.004	-----	-----	0.314	-----
1	1015	90	-----	-----	0.001	0.008	-----	0.252
1	1105	140	0.022	0.018	-----	-----	0.139	-----
1	1115	150	-----	-----	0.022	0.028	-----	0.108
1	1205	200	-----	0.147	-----	-----	0.013	-----
1	1215	210	-----	-----	0.108	0.113	-----	0.021
1	1305	260	0.516	0.522	-----	-----	0.003	-----
1	1315	270	-----	-----	0.304	0.314	-----	0.009
1	1405	320	0.858	0.842	-----	-----	0.007	-----
1	1415	330	-----	-----	0.500	0.510	-----	0.008
1	1505	380	0.899	0.880	-----	-----	0.009	-----
1	1515	390	-----	-----	0.640	0.644	-----	0.012

----- NO DATA TAKEN

	SIDE 1 NO PPM BENDIX	SIDE 2 NO PPM BENDIX	SIDE 1 NO2-UNC PPM BENDIX	SIDE 2 NO2-UNC PPM BENDIX	SIDE 1 NOX-UNC PPM BENDIX	SIDE 2 NOX-UNC PPM BENDIX
2						
E						
-1						
01	0.000	0.000	0.000	0.000	0.000	0.000
01	-----	0.468	-----	0.162	-----	0.620
--	0.465	-----	0.168	-----	0.620	-----
--	0.430	-----	0.195	-----	0.615	-----
03	-----	0.379	-----	0.243	-----	0.615
--	0.314	-----	0.294	-----	0.600	-----
08	-----	0.252	-----	0.364	-----	0.615
--	0.139	-----	0.447	-----	0.565	-----
28	-----	0.108	-----	0.515	-----	0.600
--	0.013	-----	0.500	-----	0.510	-----
13	-----	0.021	-----	0.560	-----	0.568
--	0.003	-----	0.408	-----	0.409	-----
14	-----	0.009	-----	0.546	-----	0.538
--	0.007	-----	0.224	-----	0.224	-----
10	-----	0.008	-----	0.506	-----	0.500
--	0.009	-----	0.117	-----	0.122	-----
44	-----	0.012	-----	0.484	-----	0.481

AFF- 19
JP-4 (SHALE) VS N-BUTANE
1980 JULY 30

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 THC PFMC BK6800-2	SIDE 2 THC PFMC BK6800-2	SIDE 2 N-C4 PPM DMS-1	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-1	SIDE CONDE 10E3/0 CNC-1
1 615	-150	-----	-----	0.0026	-----	-----	-----	-----
1 618	-147	-----	-----	-----	25.8	25.8	-----	0.0
1 728	-77	-----	-----	8.653	-----	-----	-----	-----
1 745	-60	-----	45.10	-----	-----	31.8	2.30	-----
1 825	-20	33.10	-----	-----	32.0	-----	2.27	0.0
1 905	20	33.60	-----	-----	34.0	-----	2.66	0.0
1 913	28	-----	-----	8.826	-----	-----	-----	-----
1 915	30	-----	42.10	-----	-----	36.6	2.91	-----
1 1005	80	32.80	-----	-----	37.4	-----	2.79	11.0
1 1013	88	-----	-----	8.653	-----	-----	-----	-----
1 1015	90	-----	41.80	-----	-----	40.2	2.58	-----
1 1105	140	32.30	-----	-----	40.5	-----	2.93	9.0
1 1113	148	-----	-----	8.549	-----	-----	-----	-----
1 1115	150	-----	41.60	-----	-----	40.9	3.66	-----
1 1205	200	31.40	-----	-----	43.0	-----	3.69	0.0
1 1215	210	-----	41.40	-----	-----	45.2	2.40	-----
1 1305	260	29.70	-----	-----	43.5	-----	2.91	6.0
1 1314	269	-----	-----	8.411	-----	-----	-----	-----
1 1315	270	-----	41.00	-----	-----	43.6	3.03	-----
1 1405	320	27.80	-----	-----	43.9	-----	2.47	4.0
1 1413	328	-----	-----	8.462	-----	-----	-----	-----
1 1415	330	-----	40.70	-----	-----	43.6	2.29	-----
1 1505	380	26.50	-----	-----	41.6	-----	2.10	3.0
1 1515	390	-----	40.30	-----	-----	41.6	2.41	-----
1 1548	423	-----	-----	8.393	-----	-----	-----	-----

----- NO DATA TAKEN

AFF- 19

JP-4 (SHALE) VS N-BUTANE
1980 JULY 30

CLOCK TIME		ELAPSED TIME	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET	SIDE 1 N-C4 PPM DMS-1	SIDE 1 C5-ISOMMS PPM SE-52C-2	SIDE N-C PPM DMS
BY	HR.	(MIN)							
1	615	-150	-----	-----	-----	-----	0.0026	-----	0.00
1	617	-148	-----	-----	-----	-----	-----	0.0001 A	-----
1	618	-147	0.	0.	0.	0.	-----	-----	-----
1	745	-60	-----	0.	-----	0.	-----	-----	-----
1	823	-22	-----	-----	-----	-----	0.0807	-----	0.05
1	825	-20	0.	-----	0.	-----	-----	0.0274	-----
1	905	20	0.	-----	0.	-----	-----	-----	-----
1	906	21	-----	-----	-----	-----	-----	0.0275	-----
1	915	30	-----	0.	-----	0.	-----	-----	-----
1	1004	79	-----	-----	-----	-----	-----	0.0266	-----
1	1005	80	0.	-----	0.	-----	-----	-----	-----
1	1015	90	-----	0.	-----	0.	-----	-----	-----
1	1104	139	-----	-----	-----	-----	-----	0.0274	-----
1	1105	140	0.	-----	0.	-----	-----	-----	-----
1	1115	150	-----	0.	-----	0.	-----	-----	-----
1	1203	198	-----	-----	-----	-----	0.0812	-----	0.05
1	1205	200	0.	-----	0.	-----	-----	-----	-----
1	1215	210	-----	0.	-----	0.	-----	-----	-----
1	1304	259	-----	-----	-----	-----	-----	0.0294	-----
1	1305	260	48.	-----	0.	-----	-----	-----	-----
1	1315	270	-----	0.	-----	0.	-----	-----	-----
1	1404	319	-----	-----	-----	-----	-----	0.0314	-----
1	1405	320	273.	-----	40.	-----	-----	-----	-----
1	1415	330	-----	0.	-----	0.	-----	-----	-----
1	1503	378	-----	-----	-----	-----	0.0783	-----	0.05
1	1504	379	-----	-----	-----	-----	-----	0.0301	-----
1	1505	380	314.	-----	70.	-----	-----	-----	-----
1	1515	390	-----	0.	-----	0.	-----	-----	-----

----- NO DATA TAKEN

SIDE 1 N-C4 PPM DMS-1	SIDE 1 C5-ISOMS PPM SE-52C-2	SIDE 1 N-C5 PPM DMS-1	SIDE 1 N-C6 PPM SE-52C-2	SIDE 1 N-C6 PPM DMS-1	SIDE 1 N-C7 PPM SE-52C-2	SIDE 1 N-C8 PPM SE-52C-2
0.0026	-----	0.0001	-----	-----	-----	-----
-----	0.0001 A	-----	0.0000 A	-----	0.0000 A	0.0005 A
-----	-----	-----	-----	-----	-----	-----
0.0807	-----	0.0531	-----	0.0596	-----	-----
-----	0.0274	-----	0.0561	-----	0.0336	0.2966
-----	-----	-----	-----	-----	-----	-----
-----	0.0275	-----	0.0569	-----	0.0342	0.3027
-----	-----	-----	-----	-----	-----	-----
-----	0.0266	-----	0.0558	-----	0.0336	0.2756
-----	-----	-----	-----	-----	-----	-----
-----	0.0274	-----	0.0563	-----	0.0337	0.2962
-----	-----	-----	-----	-----	-----	-----
0.0812	-----	0.0522	-----	0.0578	-----	-----
-----	-----	-----	-----	-----	-----	-----
-----	0.0294	-----	0.0529	-----	0.0319	0.2755
-----	-----	-----	-----	-----	-----	-----
-----	0.0314	-----	0.0519	-----	0.0313	0.2673
-----	-----	-----	-----	-----	-----	-----
0.0783	-----	0.0505	-----	0.0543	-----	-----
-----	0.0301	-----	0.0544	-----	0.0299	0.2524
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----

AFF- 19
JP-4 (SHALE) VS N-BUTANE
1980 JULY 30

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 N-C9 PPM SE-52C-2	SIDE 1 C10 PPM SE-52C-2	SIDE 1 C11 PPM SE-52C-2	SIDE 1 TOLUENE PPM SE-52C-2	SIDE 1 TOLUENE PPM 10'C-600	SIDE 1 124TMEBZ RAW DATA SE-52C-2	SIDE 124TME RAW DA SE-52C
1 615	-150	-----	-----	-----	-----	0.0003	-----	-----
1 617	-148	0.0001 A	0.0001 A	0.0021 A	0.0007 A	-----	976.0	976.0
1 618	-147	-----	-----	-----	-----	-----	-----	-----
1 729	-76	-----	-----	-----	-----	-----	-----	255.0
1 745	-60	-----	-----	-----	-----	-----	-----	-----
1 823	-22	-----	-----	-----	-----	0.0376	-----	-----
1 825	-20	0.0551	0.1244	0.2330	0.1238	-----	2.0E 04	-----
1 905	20	-----	-----	-----	-----	-----	-----	-----
1 906	21	0.0562	0.1259	0.2353	0.1261	-----	2.1E 04	-----
1 915	30	-----	-----	-----	-----	-----	-----	-----
1 1004	79	0.0478	0.1128	0.1995	0.1239	-----	1.1E 04	-----
1 1005	80	-----	-----	-----	-----	-----	-----	-----
1 1015	90	-----	-----	-----	-----	-----	-----	-----
1 1104	139	0.0547	0.1221	0.2183	0.1241	-----	1.8E 04	-----
1 1105	140	-----	-----	-----	-----	-----	-----	-----
1 1115	150	-----	-----	-----	-----	-----	-----	-----
1 1203	198	-----	-----	-----	-----	0.0372	-----	-----
1 1205	200	-----	-----	-----	-----	-----	-----	-----
1 1213	208	-----	-----	-----	-----	-----	-----	5472.
1 1215	210	-----	-----	-----	-----	-----	-----	-----
1 1304	259	0.0499	0.1106	0.2036	0.1166	-----	1.5E 04	-----
1 1305	260	-----	-----	-----	-----	-----	-----	-----
1 1315	270	-----	-----	-----	-----	-----	-----	-----
1 1404	319	0.0476	0.1043	0.1812	0.1143	-----	1.4E 04	-----
1 1405	320	-----	-----	-----	-----	-----	-----	-----
1 1415	330	-----	-----	-----	-----	-----	-----	-----
1 1503	378	-----	-----	-----	-----	0.0337	-----	-----
1 1504	379	0.0450	0.0996	0.1646	0.1084	-----	1.2E 04	-----
1 1505	380	-----	-----	-----	-----	-----	-----	-----
1 1515	390	-----	-----	-----	-----	-----	-----	-----
1 1549	424	-----	-----	-----	-----	-----	-----	6529.

----- NO DATA TAKEN

	SIDE 1 TOLUENE PPM 10'C-600	SIDE 1 124TMEBZ RAW DATA SE-52C-2	SIDE 2 124TMEBZ RAW DATA SE-52C-2	SIDE 1 M+P-XYL PPM SE-52C-2	SIDE 1 CO PPM BK6800-2	SIDE 2 CO PPM BK6800-2
2	0.0003	-----	-----	-----	-----	-----
7 A	-----	976.0	976.0	0.0003 A	-----	-----
	-----	-----	-----	-----	-----	-----
	-----	-----	255.0	-----	-----	1.98
	0.0376	-----	-----	-----	-----	-----
8	-----	2.0E 04	-----	0.0301	1.95	-----
	-----	-----	-----	-----	1.97	-----
1	-----	2.1E 04	-----	0.0305	-----	2.00
	-----	-----	-----	-----	-----	-----
7	-----	1.1E 04	-----	0.0291	2.02	-----
	-----	-----	-----	-----	-----	2.03
2	-----	1.8E 04	-----	0.0292	2.00	-----
	-----	-----	-----	-----	-----	1.98
	0.0372	-----	-----	-----	-----	-----
	-----	-----	-----	-----	2.04	-----
	-----	-----	5472.	-----	-----	2.03
6	-----	1.5E 04	-----	0.0257	2.04	-----
	-----	-----	-----	-----	-----	2.11
3	-----	1.4E 04	-----	0.0241	2.17	-----
	-----	-----	-----	-----	-----	2.14
	0.0337	-----	-----	-----	-----	-----
4	-----	1.2E 04	-----	0.0224	2.15	-----
	-----	-----	-----	-----	-----	2.15
	-----	-----	6529.	-----	-----	-----

AFF- 19

JP-4 (SHALE) VS N-BUTANE
1980 JULY 30

CLOCK TIME		ELAPSED TIME	SIDE 1 PAN PPM ECD-1	SIDE 2 PAN PPM ECD-1	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA	SIDE 2 ACETALD PPM 10'C-600	SIDE 2 PROPALD PPM 10'C-600	SIDE 2 ACE1 PPM 10'C
DY	HR.	(MIN)							
1	615	-150	-----	-----	-----	-----	0.0052	0.0002	B 0.0
1	717	-88	0.000	0.000	-----	-----	-----	-----	-----
1	728	-77	-----	-----	-----	-----	-----	0.0001	0.0
1	729	-76	-----	0.000	-----	-----	-----	-----	-----
1	738	-67	-----	-----	-----	0.021	-----	-----	-----
1	825	-20	0.000	-----	-----	-----	-----	-----	-----
1	831	-14	-----	-----	0.008	-----	-----	-----	-----
1	906	21	0.000	-----	-----	-----	-----	-----	-----
1	913	28	-----	0.000	-----	-----	-----	-----	-----
1	1004	79	0.000	-----	-----	-----	-----	-----	-----
1	1013	88	-----	0.000	-----	-----	-----	-----	-----
1	1104	139	0.001	-----	-----	-----	-----	-----	-----
1	1113	148	-----	0.002	-----	-----	-----	-----	-----
1	1146	181	-----	-----	0.046	-----	-----	-----	-----
1	1204	199	0.005	-----	-----	-----	-----	-----	-----
1	1213	208	-----	0.007	-----	-----	-----	-----	-----
1	1216	211	-----	-----	-----	0.046	-----	-----	-----
1	1220	215	-----	-----	-----	-----	-----	0.0015	0.0
1	1304	259	-----	-----	-----	-----	-----	-----	-----
1	1314	269	-----	0.017	-----	-----	-----	-----	-----
1	1404	319	-----	-----	-----	-----	-----	-----	-----
1	1413	328	-----	0.033	-----	-----	-----	-----	-----
1	1445	360	-----	-----	-----	0.063	-----	-----	-----
1	1504	379	-----	-----	-----	-----	-----	-----	-----
1	1515	390	-----	-----	0.048	-----	-----	-----	-----
1	1548	423	-----	-----	-----	-----	0.2444	0.0025	0.0

----- NO DATA TAKEN

11 NOV 1981

PAGE 6

	SIDE 2 ACETALD PPM 10'C-600	SIDE 2 PROPALD PPM 10'C-600	SIDE 2 ACETONE PPM 10'C-600	SIDE 2 MEK PPM 10'C-600	SIDE 2 BUTYRAL PPM 10'C-600	SIDE 1 C4-N-2 PPM ECD-1	SIDE 2 C4-N-2 PPM ECD-1
2	0.0052	0.0002 B	0.0003	0.0004	0.0000 B	-----	-----
0	-----	-----	-----	-----	-----	0.0000	0.0000
	-----	0.0001	0.0004	0.0004	0.0001	-----	0.0000
	-----	-----	-----	-----	-----	-----	-----
21	-----	-----	-----	-----	-----	0.0000	-----
	-----	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	0.0000	-----
	-----	-----	-----	-----	-----	0.0005	0.0017
	-----	-----	-----	-----	-----	0.0000	0.0039
	-----	-----	-----	-----	-----	0.0000	0.0076
	-----	-----	-----	-----	-----	0.0000	0.0120
	-----	-----	-----	-----	-----	-----	-----
46	-----	0.0015	0.0018	0.0479	0.0029	0.0184	0.0175
	-----	-----	-----	-----	-----	0.0363	0.0226
	-----	-----	-----	-----	-----	-----	-----
63	-----	-----	-----	-----	-----	0.0419	-----
	-----	-----	-----	-----	-----	-----	-----
	0.2444	0.0025	0.0017	0.0605	0.0040	-----	-----

AFF- 19
 JF-4 (SHALE) VS N-BUTANE
 1980 JULY 30

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 C3-N-2 PPM ECD-1	SIDE 2 C3-N-2 PPM ECD-1
1 717	-88	0.0000	0.0000
1 729	-76	-----	0.0000
1 825	-20	0.0000	-----
1 906	21	0.0000	-----
1 913	28	-----	0.0000
1 1004	79	0.0009	-----
1 1013	88	-----	0.0000
1 1104	139	0.0010	-----
1 1113	148	-----	0.0004
1 1204	199	0.0010	-----
1 1213	208	-----	0.0012
1 1304	259	0.0010	-----
1 1314	269	-----	0.0016
1 1404	319	0.0015	-----
1 1413	328	-----	0.0030
1 1504	379	0.0013	-----

----- NO DATA TAKEN

NOTES

- A SOME OF THE BACKGROUND ASSIGNMENTS ARE DOUBTFUL BECAUSE A DEFINITE PEAK PATTERN HAS NOT YET BEEN ESTABLISHED.
- B FACTORS ESTIMATED BY RATIO RETENTION TIMES WITH OLD FACTORS

AFF- 20
JP-4 (PETROLEUM) VS N-BUTANE
1980 AUG 1

0612: BAG FILLED WITH PURE AIR.

WET BULB= 21 C, DRY BULB= 26 C, R.H.= 64%

0646: 5 ML NO2 INJECTED

0648: 16 ML NO INJECTED

0651: 60 ML FREON 12 ADDED

0656: BAG DIVIDED.

0713: 125 ML N-C4 INJECTED INTO SIDE 2 AND MIXED

0756: 370 MICROLITERS JP-4(PET) INJECTED INTO SIDE 1 AND MIXED

0843: BAG UNCOVERED.

T=0 AT 843 PST

BAG NO. 16 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	37.0	5.8	DEG C	SIDE 1
T	DORIC-1	37.5	6.0	DEG C	SIDE 2
UV RAD	EFFLEY-1	2.90	0.46	MW/CM2	

ID	INST.	INITIAL CONC.	UNITS	
NO	BENDIX	0.416	PPM	SIDE 1
NO	BENDIX	0.416	PPM	SIDE 2
NO2-UNC	BENDIX	0.154	PPM	SIDE 1
NO2-UNC	BENDIX	0.155	PPM	SIDE 2
THC	BK6800-2	33.00	PPMC	SIDE 1
THC	BK6800-2	43.10	PPMC	SIDE 2
N-C4	DMS-1	8.9300	PPM	SIDE 2

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2750	SE-52C-2	RM-121; 30M SE-52 QUARTZ CAP. GC; FID
2920	10'C-60C	RM-121; 10' 10% CARBOWAX-600 GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
1790	D-1790	DASIBI 1790 OZONE MONITOR
1700	BENDIX	AF-LAB BENDIX NO-NOX NYLON FILT ANALYZER
4900	B-03-1	BENDIX 03 ANALYZER MD5513340-X SN32787-5
1600	BK6800-2	BECKMAN CO,HC ANALYZER SN:100016
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
3000	CA	CPROMOTROPIC ACID HCHO ANALYSIS
2000	ECD-1	RM-121; 12" 5% CARBOWAX-400 GC; ECD
4350	CLIMET	CLIMET 206 OPTICAL PART. CTR;SN:76-148
4130	EFFLEY-1	ARB TRAILER; EFFLEY 11692 UV RADIOMETER

AFF- 20
 JP-4 (PETROLEUM) VS N-BUTANE
 1980 AUG 1

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 OZONE PPM D-1790	SIDE 1 OZONE PPM B-03-1	SIDE 2 OZONE PPM D-1790	SIDE 2 OZONE PPM B-03-1	SIDE 1 NO PPM BENDIX	SIDE 2 NO PPM BENDIX	SIDE NO2-UN PPM BENDI
1 626	-137	0.000	0.000	0.000	0.000	0.000	0.000	0.00
1 727	-76	-----	-----	0.000	0.000	-----	0.414	-----
1 820	-23	0.008	0.006	-----	-----	0.416	-----	0.15
1 925	42	0.009	0.005	-----	-----	0.324	-----	0.21
1 935	52	-----	-----	0.000	0.007	-----	0.326	-----
1 1005	82	0.021	0.019	-----	-----	0.152	-----	0.38
1 1015	92	-----	-----	0.000	0.010	-----	0.235	-----
1 1105	142	0.261	0.250	-----	-----	0.011	-----	0.46
1 1115	152	-----	-----	0.021	0.031	-----	0.098	-----
1 1205	202	0.703	0.686	-----	-----	0.008	-----	0.32
1 1215	212	-----	-----	0.115	0.124	-----	0.023	-----
1 1305	262	0.959	0.934	-----	-----	0.006	-----	0.20
1 1315	272	-----	-----	0.274	0.286	-----	0.009	-----
1 1405	322	0.986	0.963	-----	-----	0.006	-----	0.13
1 1415	332	-----	-----	0.443	0.454	-----	0.007	-----
1 1505	382	0.957	0.936	-----	-----	0.006	-----	0.11
1 1515	392	-----	-----	0.573	0.584	-----	0.011	-----

----- NO DATA TAKEN

SIDE 1 NO2-UNC PPM BENDIX	SIDE 2 NO2-UNC PPM BENDIX	SIDE 1 NOX-UNC PPM BENDIX	SIDE 2 NOX-UNC PPM BENDIX
0.003	0.003	0.003	0.003
-----	0.155	-----	0.550
0.154	-----	0.553	-----
0.210	-----	0.518	-----
-----	0.228	-----	0.542
0.383	-----	0.518	-----
-----	0.326	-----	0.544
0.462	-----	0.451	-----
-----	0.471	-----	0.534
0.327	-----	0.318	-----
-----	0.514	-----	0.516
0.203	-----	0.196	-----
-----	0.500	-----	0.510
0.137	-----	0.136	-----
-----	0.503	-----	0.483
0.112	-----	0.112	-----
-----	0.467	-----	0.451

AFF- 20

JP-4 (PETROLEUM) VS N-BUTANE
1980 AUG 1

CLOCK TIME		ELAPSED TIME	SIDE 1 THC PPMC	SIDE 2 THC PPMC	SIDE 2 N-C4 PPM	SIDE 1 T DEG C	SIDE 2 T DEG C	UV RAD MW/CM2 EPPLEY-1	SI CON 10E CNC
DY	HR.	(MIN)	BK6800-2	BK6800-2	DMS-1	DORIC-1	DORIC-1		
1	622	-141	-----	-----	0.0040	-----	-----	-----	--
1	626	-137	4.22	4.22	-----	26.0	26.0	-----	--
1	724	-79	-----	-----	8.930	-----	-----	-----	--
1	727	-76	-----	43.10	-----	-----	30.2	-----	--
1	820	-23	33.00	-----	-----	31.9	-----	-----	--
1	900	17	-----	-----	-----	-----	-----	2.09	--
1	921	38	-----	-----	7.995	-----	-----	-----	--
1	925	42	33.10	-----	-----	32.7	-----	2.33	7
1	930	47	-----	-----	-----	-----	-----	2.52	--
1	935	52	-----	40.70	-----	-----	34.3	1.98	--
1	1000	77	-----	-----	-----	-----	-----	3.00	--
1	1005	82	31.60	-----	-----	36.6	-----	3.05	5
1	1014	91	-----	-----	7.961	-----	-----	-----	--
1	1015	92	-----	40.10	-----	-----	39.6	3.38	--
1	1030	107	-----	-----	-----	-----	-----	2.91	--
1	1100	137	-----	-----	-----	-----	-----	3.56	--
1	1105	142	30.20	-----	-----	41.0	-----	3.33	4
1	1113	150	-----	-----	8.099	-----	-----	-----	--
1	1115	152	-----	39.90	-----	-----	42.5	3.55	--
1	1130	167	-----	-----	-----	-----	-----	3.00	--
1	1200	197	-----	-----	-----	-----	-----	3.60	--
1	1205	202	28.60	-----	-----	43.0	-----	2.69	3
1	1215	212	-----	39.70	-----	-----	43.0	3.35	--
1	1230	227	-----	-----	-----	-----	-----	3.37	--
1	1300	257	-----	-----	-----	-----	-----	2.76	--
1	1305	262	27.20	-----	-----	42.6	-----	2.64	2
1	1314	271	-----	-----	7.736	-----	-----	-----	--
1	1315	272	-----	39.40	-----	-----	42.8	3.21	--
1	1330	287	-----	-----	-----	-----	-----	2.71	--
1	1400	317	-----	-----	-----	-----	-----	3.14	--
1	1405	322	26.30	-----	-----	40.8	-----	3.28	1
1	1413	330	-----	-----	7.623	-----	-----	-----	--
1	1415	332	-----	39.20	-----	-----	40.2	3.30	--
1	1430	347	-----	-----	-----	-----	-----	2.88	--
1	1500	377	-----	-----	-----	-----	-----	2.21	--
1	1505	382	26.40	-----	-----	38.8	-----	2.69	1
1	1515	392	-----	39.10	-----	-----	38.9	2.36	--
1	1530	407	-----	-----	-----	-----	-----	2.71	--
1	1550	427	-----	-----	7.701	-----	-----	-----	--
1	1600	437	-----	-----	-----	-----	-----	2.41	--

----- NO DATA TAKEN

SIDE 2 T DEG C ORIC-1	UV RAD MW/CM2 EPPLEY-1	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET
26.0	-----	0.1	0.1	1.	1.
30.2	-----	0.0	0.0	0.	0.
	2.09	-----	-----	-----	-----
	2.33	78.0	-----	0.	-----
	2.52	-----	-----	-----	-----
34.3	1.98	-----	0.0	-----	0.
	3.00	-----	-----	-----	-----
	3.05	59.0	-----	0.	-----
39.6	3.38	-----	0.0	-----	0.
	2.91	-----	-----	-----	-----
	3.56	-----	-----	-----	-----
	3.33	42.5	-----	0.	-----
42.5	3.55	-----	0.0	-----	0.
	3.00	-----	-----	-----	-----
	3.60	-----	-----	-----	-----
	2.69	30.0	-----	22.	-----
43.0	3.35	-----	0.1	-----	1.
	3.37	-----	-----	-----	-----
	2.76	-----	-----	-----	-----
	2.64	23.2	-----	259.	-----
42.8	3.21	-----	0.0	-----	1.
	2.71	-----	-----	-----	-----
	3.14	-----	-----	-----	-----
	3.28	17.0	-----	343.	-----
40.2	3.30	-----	0.0	-----	0.
	2.88	-----	-----	-----	-----
	2.21	-----	-----	-----	-----
	2.69	11.7	-----	347.	-----
38.9	2.36	-----	0.0	-----	0.
	2.71	-----	-----	-----	-----
	2.41	-----	-----	-----	-----

2

AFF- 20
 JF-4 (PETROLEUM) VS N-BUTANE
 1980 AUG 1

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET	SIDE 1 N-C4 PPM DMS-1	SIDE 1 C5-ISOMS PPM SE-52C-2	SIDE N-C PPM DMS
1 622	-141	-----	-----	-----	-----	0.0040	-----	0.00
1 623	-140	-----	-----	-----	-----	-----	-----	-----
1 626	-137	0.	0.	0.	0.	-----	-----	-----
1 727	-76	-----	0.	-----	0.	-----	-----	-----
1 818	-25	-----	-----	-----	-----	0.0174	-----	0.00
1 820	-23	0.	-----	0.	-----	-----	0.0372	-----
1 925	42	0.	-----	0.	-----	-----	-----	-----
1 935	52	-----	0.	-----	0.	-----	-----	-----
1 1005	82	0.	-----	0.	-----	-----	-----	-----
1 1006	83	-----	-----	-----	-----	-----	0.0370	-----
1 1015	92	-----	0.	-----	0.	-----	-----	-----
1 1104	141	-----	-----	-----	-----	-----	0.0373	-----
1 1105	142	0.	-----	0.	-----	-----	-----	-----
1 1115	152	-----	0.	-----	0.	-----	-----	-----
1 1204	201	-----	-----	-----	-----	0.0171	-----	0.00
1 1205	202	0.	-----	0.	-----	-----	-----	-----
1 1215	212	-----	0.	-----	0.	-----	-----	-----
1 1304	261	-----	-----	-----	-----	-----	0.0336	-----
1 1305	262	19.	-----	0.	-----	-----	-----	-----
1 1315	272	-----	0.	-----	0.	-----	-----	-----
1 1404	321	-----	-----	-----	-----	-----	0.0420	-----
1 1405	322	72.	-----	0.	-----	-----	-----	-----
1 1415	332	-----	0.	-----	0.	-----	-----	-----
1 1501	378	-----	-----	-----	-----	-----	0.0343	-----
1 1503	780	-----	-----	-----	-----	0.0173	-----	-----
1 1505	382	87.	-----	0.	-----	-----	-----	-----
1 1515	392	-----	0.	-----	0.	-----	-----	-----

----- NO DATA TAKEN

SIDE 1 N-C4 PPM DMS-1	SIDE 1 C5-ISOMS PPM SE-52C-2	SIDE 1 N-C5 PPM DMS-1	SIDE 1 N-C6 PPM DMS-1	SIDE 1 N-C6 PPM SE-52C-2	SIDE 1 N-C7 PPM SE-52C-2	SIDE 1 N-C8 PPM SE-52C-2
0.0040	-----	0.0000	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----
0.0174	-----	0.0695	0.1140	-----	-----	-----
-----	0.0372	-----	-----	0.1095	0.0779	0.6524
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----
-----	0.0370	-----	-----	0.1107	0.0783	0.6445
-----	-----	-----	-----	-----	-----	-----
-----	0.0373	-----	-----	0.1079	0.0771	0.6231
-----	-----	-----	-----	-----	-----	-----
0.0171	-----	0.0688	0.1030	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----
-----	0.0336	-----	-----	0.1083	0.0710	0.5637
-----	-----	-----	-----	-----	-----	-----
-----	0.0423	-----	-----	0.1060	0.0701	0.5527
-----	-----	-----	-----	-----	-----	-----
-----	0.0343	-----	-----	0.1065	0.0701	0.5505
0.0173	-----	-----	0.1070	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----

AFF- 20

JP-4 (PETROLEUM) VS N-BUTANE
1980 AUG 1

CLOCK TIME		ELAPSED TIME	SIDE 1 N-C9 PPM	SIDE 1 C10 PPM	SIDE 1 C11 PPM	SIDE 1 C12 RAW DATA	SIDE 1 TOLUENE PPM	SIDE 1 TOLUENE PPM	
DY	HR.	(MIN)	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2	10'C-600	SI
1	622	-141	-----	-----	-----	-----	-----	0.0003	
1	623	-140	-----	-----	-----	-----	-----	-----	
1	626	-137	-----	-----	-----	-----	-----	-----	
1	727	-76	-----	-----	-----	-----	-----	-----	
1	818	-25	-----	-----	-----	-----	-----	0.0359	
1	820	-23	0.0479	0.0613	0.0962	3.278	0.2003	-----	
1	910	27	-----	-----	-----	-----	-----	-----	
1	925	42	-----	-----	-----	-----	-----	-----	
1	935	52	-----	-----	-----	-----	-----	-----	
1	1005	82	-----	-----	-----	-----	-----	-----	
1	1006	83	0.0467	0.0597	0.0948	3.351	0.1988	-----	
1	1015	92	-----	-----	-----	-----	-----	-----	
1	1104	141	0.0454	0.0580	0.0919	3.265	0.1939	-----	
1	1105	142	-----	-----	-----	-----	-----	-----	
1	1115	152	-----	-----	-----	-----	-----	-----	
1	1204	201	-----	-----	-----	-----	-----	0.0328	
1	1205	202	-----	-----	-----	-----	-----	-----	
1	1215	212	-----	-----	-----	-----	-----	-----	
1	1304	261	0.0402	0.0507	0.0778	2.831	0.1776	-----	
1	1305	262	-----	-----	-----	-----	-----	-----	
1	1315	272	-----	-----	-----	-----	-----	-----	
1	1404	321	0.0398	0.0489	0.0742	2.649	0.1749	-----	
1	1405	322	-----	-----	-----	-----	-----	-----	
1	1415	332	-----	-----	-----	-----	-----	-----	
1	1501	378	0.0391	0.0487	0.0729	2.555	0.1745	-----	
1	1503	380	-----	-----	-----	-----	-----	0.0333	
1	1505	382	-----	-----	-----	-----	-----	-----	
1	1515	392	-----	-----	-----	-----	-----	-----	

----- NO DATA TAKEN

1	SIDE 1 TOLUENE PPM SE-52C-2	SIDE 1 TOLUENE PPM 10'C-600	SIDE 1 124TMEBZ RAW DATA SE-52C-2	SIDE 1 M+P-XYL PPM SE-52C-2	SIDE 1 CO PPM BK6800-2	SIDE 2 CO PPM BK6800-2
	-----	0.0003	-----	-----	-----	-----
	-----	-----	-----	-----	1.72	1.72
	-----	-----	-----	-----	-----	1.79
	-----	0.0359	-----	-----	-----	-----
78	0.2003	-----	2.1E 04	0.0312	1.79	-----
	-----	-----	2.1E 04	-----	-----	-----
	-----	-----	-----	-----	2.00	-----
	-----	-----	-----	-----	-----	2.02
	-----	-----	-----	-----	1.95	-----
51	0.1988	-----	2.1E 04	0.0295	-----	1.98
	-----	-----	-----	-----	-----	-----
65	0.1939	-----	1.8E 04	0.0282	-----	-----
	-----	-----	-----	-----	1.97	-----
	-----	-----	-----	-----	-----	1.96
	-----	0.0328	-----	-----	-----	-----
	-----	-----	-----	-----	2.00	-----
	-----	-----	-----	-----	-----	1.96
31	0.1776	-----	1.4E 04	0.0235	-----	-----
	-----	-----	-----	-----	2.07	-----
	-----	-----	-----	-----	-----	2.05
49	0.1749	-----	1.3E 04	0.0224	-----	-----
	-----	-----	-----	-----	2.20	-----
	-----	-----	-----	-----	-----	2.05
55	0.1745	-----	1.2E 04	0.0217	-----	-----
	-----	0.0333	-----	-----	-----	-----
	-----	-----	-----	-----	2.21	-----
	-----	-----	-----	-----	-----	2.05

AFF- 20
JP-4 (PETROLEUM) VS N-BUTANE
1980 AUG 1

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PAN PPM ECD-1	SIDE 2 PAN PPM ECD-1	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA	SIDE 2 ACETALD PPM 10'C-600	SIDE 2 PROPALD PPM 10'C-600	SIDE ACETO PPM 10'C-
1 622	-141	-----	-----	-----	-----	0.0027	0.0003	0.00
1 624	-139	0.000	0.000	-----	-----	-----	-----	-----
1 724	-79	-----	-----	-----	-----	-----	-----	-----
1 726	-77	-----	0.000	-----	-----	-----	-----	-----
1 735	-68	-----	-----	-----	0.013	-----	-----	-----
1 819	-24	0.000	-----	-----	-----	-----	-----	-----
1 826	-17	-----	-----	0.015	-----	-----	-----	-----
1 910	27	0.000	-----	-----	-----	-----	-----	-----
1 933	50	-----	0.000	-----	-----	-----	-----	-----
1 1006	83	0.000	-----	-----	-----	-----	-----	-----
1 1014	91	-----	0.000	-----	-----	-----	-----	-----
1 1104	141	0.000	-----	-----	-----	-----	-----	-----
1 1113	150	-----	0.004	-----	-----	-----	-----	-----
1 1155	192	-----	-----	0.067	-----	-----	-----	-----
1 1205	202	0.000	-----	-----	-----	-----	-----	-----
1 1214	211	-----	0.007	-----	-----	-----	-----	-----
1 1227	224	-----	-----	-----	0.033	-----	-----	-----
1 1233	230	-----	-----	-----	-----	0.1080	0.0007	0.00
1 1304	261	-----	-----	-----	-----	-----	-----	-----
1 1314	271	-----	0.014	-----	-----	-----	-----	-----
1 1323	280	0.023	-----	-----	-----	-----	-----	-----
1 1404	321	0.019	-----	-----	-----	-----	-----	-----
1 1413	330	-----	0.003	-----	-----	-----	-----	-----
1 1500	377	-----	-----	-----	0.044	-----	-----	-----
1 1501	378	0.015	-----	-----	-----	-----	-----	-----
1 1525	402	-----	-----	0.134	-----	-----	-----	-----
1 1550	427	-----	-----	-----	-----	0.2072	0.0024	0.00
1 1554	431	-----	-----	-----	-----	-----	-----	-----

----- NO DATA TAKEN

SIDE 2 ACETALD PPM 10'C-600	SIDE 2 PROPALD PPM 10'C-600	SIDE 2 ACETONE PPM 10'C-600	SIDE 2 MEK PPM 10'C-600	SIDE 2 BUTYRAL PPM 10'C-600	SIDE 1 C4-N-2 PPM ECD-1	SIDE 2 C4-N-2 PPM ECD-1
0.0027	0.0003 G	0.0003	0.0004	-----	-----	-----
-----	-----	-----	-----	-----	0.0000	0.0000
-----	-----	-----	0.0002	-----	-----	-----
-----	-----	-----	-----	-----	-----	0.0000
-----	-----	-----	-----	-----	0.0000	-----
-----	-----	-----	-----	-----	0.0005 A	-----
-----	-----	-----	-----	-----	-----	0.0021
-----	-----	-----	-----	-----	0.0023	-----
-----	-----	-----	-----	-----	-----	0.0046
-----	-----	-----	-----	-----	0.0151	-----
-----	-----	-----	-----	-----	-----	0.0077
-----	-----	-----	-----	-----	0.0405	-----
-----	-----	-----	-----	-----	-----	0.0116
0.1080	0.0007	0.0016	0.0446	0.0021	-----	-----
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	0.0153
-----	-----	-----	-----	-----	0.0304	-----
-----	-----	-----	-----	-----	0.0643	-----
-----	-----	-----	-----	-----	-----	0.0308
-----	-----	-----	-----	-----	0.0464	-----
0.2072	0.0024	0.0042	0.0888	0.0048	-----	-----
-----	-----	-----	-----	-----	-----	0.0554

AFF- 20

JP-4 (PETROLEUM) VS N-BUTANE
1980 AUG 1

CLOCK		ELAPSED	SIDE 1	SIDE 2
TIME		TIME	C3-N-2	C3-N-2
			PPM	PPM
DY	HR.	(MIN)	ECB-1	ECB-1
1	624	-139	0.0000	0.0000
1	726	-77	-----	0.0000
1	819	-24	0.0000	-----
1	910	27	0.0000 A	-----
1	933	50	-----	0.0000
1	1006	83	0.0012	-----
1	1014	91	-----	0.0000
1	1104	141	0.0021	-----
1	1113	150	-----	0.0003
1	1205	202	0.0025	-----
1	1214	211	-----	0.0004
1	1304	261	0.0013	-----
1	1314	271	-----	0.0014
1	1323	280	0.0015	-----
1	1404	321	0.0052	-----
1	1413	330	-----	0.0015
1	1501	378	0.0048	-----
1	1554	431	-----	0.0018

----- NO DATA TAKEN

88
NOTES

A SAMPLE SAT IN SYRINGE FOR AT LEAST 10 MINUTES

AFF- 21
PROPENE/NOX CONDITIONING.
1980 AUG 5

0718: BAG FILLED WITH PURE AIR.
0745: 5 ML NO2 INJECTED
0747: 15 ML NO INJECTED
0806: 40 ML PROPENE ADDED
0956: BAG DIVIDED.
1000: BAG UNCOVERED.

T=0 AT 1000 PST

BAG NO. 16 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	34.1	3.9	DEG C	SIDE 1
T	DORIC-1	34.3	4.0	DEG C	SIDE 2
UV RAD	EPPLEY	3.45	0.32	MW/CM2	

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479
4300	TSI 023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4400	MRI 388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV. ONE CNC MD:RICH100, SN:143
2200	DMS-1	RM-121; DIMETHYLSULFOLANE; FID
1700	BENDIX	AF-LAB BENDIX NO-NOX NYLON FILT ANALYZER
4350	CLIMET	CLIMET OPC MD:208 SN76-148
4130	EPPLEY	ARB LAB; EPPLEY 11692 UV RADIOMETER

AFF- 21

PROPENE/NOX CONDITIONING.
1980 AUG 5

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 OZONE PPM D-1790	SIDE 2 OZONE PPM D-1790	SIDE 1 NO PPM BENDIX	SIDE 2 NO PPM BENDIX	SIDE 1 NO2-UNC PPM BENDIX	SIDE 2 NO2-UNC PPM BENDIX	SIDE NOX-L PPM BENI
1 953	-7	-----	-----	-----	-----	-----	-----	-----
1 955	-5	0.000	0.000	0.432	0.432	0.163	0.163	0.5
1 1020	20	-----	-----	-----	-----	-----	-----	-----
1 1105	65	0.128	-----	0.023	-----	0.514	-----	0.5
1 1115	75	-----	0.286	-----	0.013	-----	0.490	-----
1 1205	125	0.738	-----	0.012	-----	0.409	-----	0.4
1 1215	135	-----	0.778	-----	0.012	-----	0.400	-----
1 1228	148	-----	-----	-----	-----	-----	-----	-----
1 1243	163	-----	-----	-----	-----	-----	-----	-----
1 1305	185	0.879	-----	0.000	-----	0.363	-----	0.3
1 1315	195	-----	0.850	-----	0.008	-----	0.356	-----
1 1405	245	0.926	-----	0.008	-----	0.323	-----	0.3
1 1415	255	-----	0.847	-----	0.010	-----	0.317	-----
1 1440	280	-----	-----	-----	-----	-----	-----	-----
1 1451	291	-----	-----	-----	-----	-----	-----	-----

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	UV RAD MW/CM2 EPFLEY	SIDE 1 AER.V UM3/CC TSI 023	SIDE 2 AER.V UM3/CC TSI 023	SIDE 1 AER.N PART/CC TSI 023	SIDE AER. PART/ TSI 0
1 955	-5	27.8	27.8	-----	-----	-----	-----	-----
1 1000	0	-----	-----	3.12	-----	-----	-----	-----
1 1030	30	-----	-----	3.74	-----	-----	-----	-----
1 1100	60	-----	-----	3.35	-----	-----	-----	-----
1 1105	65	33.3	-----	-----	-----	-----	-----	-----
1 1115	75	-----	33.0	-----	-----	-----	-----	-----
1 1130	90	-----	-----	3.44	-----	-----	-----	-----
1 1200	120	-----	-----	3.64	-----	-----	-----	-----
1 1205	125	34.8	-----	-----	4.	-----	1.3E 04	-----
1 1215	135	-----	36.2	-----	-----	0.	-----	7252
1 1230	150	-----	-----	4.05	-----	-----	-----	-----
1 1300	180	-----	-----	3.21	-----	-----	-----	-----
1 1305	185	36.5	-----	-----	5.	-----	1.1E 04	-----
1 1315	195	-----	37.0	-----	-----	1.	-----	6382
1 1330	210	-----	-----	3.48	-----	-----	-----	-----
1 1400	240	-----	-----	3.05	-----	-----	-----	-----
1 1405	245	38.0	-----	-----	6.	-----	7714.	-----
1 1415	255	-----	37.3	-----	-----	4.	-----	4547

----- NO DATA TAKEN

11 NOV 1981

PAGE 2

NO M DIX	SIDE 1 NO2-UNC PPM BENDIX	SIDE 2 NO2-UNC PPM BENDIX	SIDE 1 NOX-UNC PPM BENDIX	SIDE 2 NOX-UNC PPM BENDIX	SIDE 1 PROPENE PPM DMS-1	SIDE 2 PROPENE PPM DMS-1
---	---	---	---	---	1.221	---
432	0.163	0.163	0.578	0.578	---	---
---	---	---	---	---	---	1.132
---	0.511	---	0.536	---	---	---
013	---	0.490	---	0.502	---	---
---	0.409	---	0.423	---	---	---
012	---	0.400	---	0.417	---	---
---	---	---	---	---	0.106	---
---	---	---	---	---	---	0.060
---	0.363	---	0.350	---	---	---
008	---	0.356	---	0.348	---	---
---	0.323	---	0.320	---	---	---
010	---	0.317	---	0.313	---	---
---	---	---	---	---	0.003	---
---	---	---	---	---	---	0.002

NO V /CC 023	SIDE 2 AER.V UM3/CC TSI 023	SIDE 1 AER.N PART/CC TSI 023	SIDE 2 AER.N PART/CC TSI 023	SIDE 1 AER.S UM2/CC TSI 023	SIDE 2 AER.S UM2/CC TSI 023	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143
---	---	---	---	---	---	0.0	0.0
---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---
---	---	---	---	---	---	0.0	---
---	---	---	---	---	---	---	0.0
---	---	---	---	---	---	---	---
4.	---	1.3E 04	---	170.	---	7.8	---
---	0.	---	7252.	---	64.	---	4.6
---	---	---	---	---	---	---	---
5.	---	1.1E 04	---	221.	---	6.6	---
---	1.	---	6382.	---	76.	---	3.8
---	---	---	---	---	---	---	---
6.	---	7714.	---	201.	---	3.7	---
---	4.	---	4547.	---	105.	---	2.1

2

AFF- 21
PROPENE/NOX CONDITIONING.
1980 AUG 5

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET	SIDE BSC 10-4 MRI
1 955	--5	3.	3.	0.	0.	0.	0.	0
1 1105	65	2.	-----	0.	-----	0.	-----	0
1 1115	75	-----	3.	-----	0.	-----	0.	---
1 1205	125	2.	-----	0.	-----	0.	-----	0
1 1215	135	-----	3.	-----	0.	-----	0.	---
1 1305	185	2.	-----	0.	-----	0.	-----	0
1 1315	195	-----	2.	-----	0.	-----	0.	---
1 1405	245	1.	-----	0.	-----	0.	-----	0
1 1415	255	-----	1.	-----	0.	-----	0.	---

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.042 PART/CC TSI 023	SIDE 2 PART.042 PART/CC TSI 023	SIDE 1 PART.075 PART/CC TSI 023	SIDE 2 PART.075 PART/CC TSI 023	SIDE 1 PART.133 PART/CC TSI 023	SIDE 2 PART.133 PART/CC TSI 023	SIDE PART TSI
1 1205	125	3741.	-----	4174.	-----	675.	-----	7
1 1215	135	-----	1914.	-----	1687.	-----	265.	---
1 1305	185	2349.	-----	5816.	-----	1133.	-----	12
1 1315	195	-----	2088.	-----	2753.	-----	386.	---
1 1405	245	696.	-----	4751.	-----	1301.	-----	11
1 1415	255	-----	696.	-----	2575.	-----	354.	---

----- NO DATA TAKEN

DE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
T>1	#PART>1	BSCAT	BSCAT	PART.024	PART.024
/CC	PART/CC	10-4 M-1	10-4 M-1	PART/CC	PART/CC
MET	CLIMET	MRI 388	MRI 388	TSI 023	TSI 023
0.	0.	0.8	0.8	-----	-----
0.	-----	0.6	-----	-----	-----
-----	0.	-----	0.7	-----	-----
0.	-----	0.8	-----	4342.	-----
-----	0.	-----	0.8	-----	3340.
0.	-----	0.7	-----	1670.	-----
-----	0.	-----	0.8	-----	1169.
0.	-----	0.4	-----	835.	-----
-----	0.	-----	0.7	-----	668.

DE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
T.133	PART.133	PART.237	PART.237	PART.422	PART.422
/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
023	TSI 023	TSI 023	TSI 023	TSI 023	TSI 023
75.	-----	74.	-----	20.	-----
-----	265.	-----	49.	-----	0.
33.	-----	123.	-----	20.	-----
-----	386.	-----	0.	-----	-13.
01.	-----	111.	-----	13.	-----
-----	554.	-----	49.	-----	-7.

7

AFF- 21

PROPENE/NOX CONDITIONING.
1980 AUG 5

CLOCK	ELAPSED	SIDE 1	SIDE 2
TIME	TIME	PART.750	PART.750
TIME	TIME	PART/CC	PART/CC
DY HR.	(MIN)	TSI 023	TSI 023
1 1205	125	4.	-----
1 1215	135	-----	-4.
1 1305	185	4.	-----
1 1315	195	-----	0.
1 1405	245	7.	-----
1 1415	255	-----	11.

----- NO DATA TAKEN

AFF- 22
JP-4 (PET) VS JP-4 (SHALE)
1980 AUG 6

0618: BAG FILLED WITH PURE AIR.
WET BULB= 17 C, DRY BULB= 20.5 C, R.H.= 72%
0642: 5 ML NO2 INJECTED
0644: 16 ML NO INJECTED
0652: BAG DIVIDED
0709: 370 MICROLITERS JP-4 (SHALE) INJECTED INTO SIDE 2
0756: 370 MICROLITERS JP-4 (PET) INJECTED INTO SIDE 1
0845: BAG UNCOVERED

T=0 AT 845 PST

BAG NO. 16 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	33.8	7.7	DEG C	SIDE 1
T	DORIC-1	34.3	7.6	DEG C	SIDE 2
UV RAD	EPPLEY-1	2.99	0.64	MW/CM2	

ID	INST.	INITIAL CONC.	UNITS	
NO	BENDIX	0.461	PPM	SIDE 1
NO	BENDIX	0.461	PPM	SIDE 2
NO2-UNC	BENDIX	0.157	PPM	SIDE 1
NO2-UNC	BENDIX	0.152	PPM	SIDE 2
THC	BK6800-2	35.20	PPMC	SIDE 1
THC	BK6800-2	33.00	PPMC	SIDE 2

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1700	BENDIX	AF-LAB BENDIX NO-NOX NYLON FILT ANALYZER
1790	D-1790	DASIBI 1790 OZONE MONITOR
1600	BK6800-2	BECKMAN CO,HC ANALYZER SN:100016
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2100	PN-1	RM-121 POROPAK-N GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2750	SE-52C-2	RM-121; 30M SE-52 QUARTZ CAP. GC; FID
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
2000	ECD-1	RM-121; 12' 5% CARBOWAX-400 GC; ECD
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4130	EPPLEY-1	ARB TRAILER; EPPLEY 11692 UV RADIOMETER

AFF- 22

JP-4 (PET) VS JP-4 (SHALE)
1980 AUG 6

CLOCK TIME		ELAPSED TIME	SIDE 1 OZONE PPM D-1790	SIDE 2 OZONE PPM D-1790	SIDE 1 NO PPM BENDIX	SIDE 2 NO PPM BENDIX	SIDE 1 NO2-UNC PPM BENDIX	SIDE 2 NO2-UNC PPM BENDIX	SIDE 1 NOX PPM BENDIX
1	630	-135	0.000	0.000	0.000	0.000	0.000	0.000	0
1	745	-60	-----	0.000	-----	0.461	-----	0.152	--
1	825	-20	0.002	-----	0.461	-----	0.157	-----	0
1	905	20	0.005	-----	0.380	-----	0.200	-----	0
1	915	30	-----	0.000	-----	0.396	-----	0.192	--
1	1005	80	0.016	-----	0.150	-----	0.397	-----	0
1	1015	90	-----	0.002	-----	0.271	-----	0.293	--
1	1105	140	0.156	-----	0.020	-----	0.496	-----	0
1	1115	150	-----	0.021	-----	0.120	-----	0.447	--
1	1205	200	0.508	-----	0.018	-----	0.375	-----	0
1	1215	210	-----	0.120	-----	0.025	-----	0.508	--
1	1305	260	0.754	-----	0.015	-----	0.242	-----	0
1	1315	270	-----	0.366	-----	0.018	-----	0.406	--
1	1405	320	0.806	-----	0.016	-----	0.162	-----	0
1	1415	330	-----	0.599	-----	0.017	-----	0.250	--
1	1505	380	0.779	-----	0.020	-----	0.132	-----	0
1	1515	390	-----	0.615	-----	0.022	-----	0.150	--

----- NO DATA TAKEN

E 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
NO	NO2-UNC	NO2-UNC	NOX-UNC	NOX-UNC	THC	THC
M	PPM	PPM	PPM	PPM	PPMC	PPMC
DIX	BENDIX	BENDIX	BENDIX	BENDIX	BK6800-2	BK6800-2
000	0.000	0.000	0.000	0.000	1.43	1.43
461	-----	0.152	-----	0.594	-----	33.00
---	0.157	-----	0.586	-----	35.20	-----
---	0.200	-----	0.575	-----	34.30	-----
396	-----	0.192	-----	0.578	-----	32.70
---	0.397	-----	0.534	-----	34.30	-----
271	-----	0.293	-----	0.558	-----	32.30
---	0.496	-----	0.478	-----	33.00	-----
120	-----	0.447	-----	0.546	-----	32.20
---	0.375	-----	0.382	-----	31.40	-----
025	-----	0.508	-----	0.494	-----	30.80
---	0.242	-----	0.250	-----	29.80	-----
018	-----	0.406	-----	0.412	-----	29.40
---	0.162	-----	0.173	-----	28.70	-----
017	-----	0.250	-----	0.261	-----	27.70
---	0.132	-----	0.146	-----	28.30	-----
022	-----	0.150	-----	0.170	-----	26.90

AFF- 22
JP-4 (PET) VS JP-4 (SHALE)
1980 AUG 6

CLOCK		ELAPSED	SIDE 1	SIDE 2	UV RAD	SIDE 1	SIDE 2	SIDE 1	SIDE 2
TIME		TIME	T	T	MW/CM2	CONDENS	CONDENS	#PART>.3	#PAR
DAY	HR.	(MIN)	DEG C	DEG C	EPPLEY-1	10E3/CC	10E3/CC	PART/CC	PART
			DORIC-1	DORIC-1		CNC-143	CNC-143	CLIMET	CLI
1	630	-135	20.3	20.3	-----	0.2	0.2	2.	
1	745	-60	-----	24.7	-----	-----	0.0	-----	
1	825	-20	26.0	-----	-----	0.0	-----	2.	---
1	900	15	-----	-----	2.09	-----	-----	-----	---
1	905	20	27.7	-----	2.72	100.0	-----	2.	---
1	915	30	-----	30.2	2.66	-----	0.0	-----	
1	930	45	-----	-----	1.58	-----	-----	-----	---
1	1000	75	-----	-----	2.33	-----	-----	-----	---
1	1005	80	31.9	-----	2.91	51.0	-----	2.	---
1	1015	90	-----	34.5	3.25	-----	0.0	-----	
1	1030	105	-----	-----	2.56	-----	-----	-----	---
1	1100	135	-----	-----	3.50	-----	-----	-----	---
1	1105	140	37.0	-----	3.39	37.0	-----	1.	---
1	1115	150	-----	38.0	3.69	-----	0.0	-----	
1	1130	165	-----	-----	3.21	-----	-----	-----	---
1	1200	195	-----	-----	4.26	-----	-----	-----	---
1	1205	200	40.0	-----	3.53	26.0	-----	4.	---
1	1215	210	-----	40.6	3.66	-----	0.0	-----	2
1	1230	225	-----	-----	3.75	-----	-----	-----	---
1	1300	255	-----	-----	3.77	-----	-----	-----	---
1	1305	260	41.5	-----	3.35	20.0	-----	230.	---
1	1315	270	-----	41.9	3.71	-----	0.0	-----	20
1	1330	285	-----	-----	3.37	-----	-----	-----	---
1	1400	315	-----	-----	2.72	-----	-----	-----	---
1	1405	320	41.4	-----	2.70	14.5	-----	341.	---
1	1415	330	-----	40.4	2.97	-----	0.0	-----	32
1	1430	345	-----	-----	2.40	-----	-----	-----	---
1	1500	375	-----	-----	2.32	-----	-----	-----	---
1	1505	380	38.6	-----	2.43	9.5	-----	354.	---
1	1515	390	-----	38.1	2.58	-----	0.0	-----	37
1	1530	405	-----	-----	2.28	-----	-----	-----	---

----- NO DATA TAKEN

	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET
	0.2	2.	2.	0.	0.	-----	-----
	0.0	-----	2.	-----	0.	0.	-----
	-----	2.	-----	0.	-----	-----	0.
	-----	-----	-----	-----	-----	-----	-----
	0.0	-----	3.	-----	0.	-----	0.
	-----	-----	-----	-----	-----	-----	-----
	-----	2.	-----	0.	-----	0.	-----
	0.0	-----	2.	-----	0.	-----	0.
	-----	-----	-----	-----	-----	-----	-----
	-----	1.	-----	0.	-----	0.	-----
	0.0	-----	1.	-----	0.	-----	0.
	-----	-----	-----	-----	-----	-----	-----
	-----	4.	-----	0.	-----	0.	-----
	0.0	-----	23.	-----	12.	-----	0.
	-----	-----	-----	-----	-----	-----	-----
	0.0	230.	-----	12.	-----	0.	-----
	-----	-----	205.	-----	158.	-----	6.
	-----	-----	-----	-----	-----	-----	-----
	-----	341.	-----	70.	-----	12.	-----
	0.0	-----	324.	-----	198.	-----	15.
	-----	-----	-----	-----	-----	-----	-----
	-----	354.	-----	92.	-----	0.	-----
	0.0	-----	372.	-----	215.	-----	37.
	-----	-----	-----	-----	-----	-----	-----

AFF- 22

JP-4 (PET) VS JP-4 (SHALE)
1980 AUG 6

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
		BSCAT 10-4 M-1 MRI-388	BSCAT 10-4 M-1 MRI-388	AER.V UM3/CC TSI-023	AER.V UM3/CC TSI-023	AER.N PART/CC TSI-023	AER.N PART/CC TSI-023	AER UM2 TSI-	
1 617	-148	-----	-----	-----	-----	-----	-----	-----	-----
1 630	-135	0.7	0.7	-----	-----	-----	-----	-----	-----
1 733	-72	-----	-----	-----	-----	-----	-----	-----	-----
1 745	-60	-----	0.9	-----	1.	-----	94.	-----	-----
1 820	-25	-----	-----	-----	-----	-----	-----	-----	-----
1 825	-20	0.8	-----	-1.	-----	400.	-----	-----	-----
1 905	20	1.0	-----	1.	-----	1.1E 05	-----	20	-----
1 915	30	-----	1.2	-----	-0.	-----	449.	-----	-----
1 1005	80	0.7	-----	17.	-----	1.1E 05	-----	102	-----
1 1015	90	-----	0.8	-----	0.	-----	750.	-----	-----
1 1105	140	1.2	-----	52.	-----	6.8E 04	-----	221	-----
1 1115	150	-----	0.7	-----	1.	-----	633.	-----	-----
1 1203	198	-----	-----	-----	-----	-----	-----	-----	-----
1 1205	200	5.7	-----	103.	-----	5.6E 04	-----	332	-----
1 1215	210	-----	1.5	-----	4.	-----	814.	-----	-----
1 1305	260	14.5	-----	148.	-----	4.2E 04	-----	370	-----
1 1314	269	-----	-----	-----	-----	-----	-----	-----	-----
1 1315	270	-----	2.4	-----	4.	-----	695.	-----	-----
1 1405	320	18.8	-----	137.	-----	3.2E 04	-----	311	-----
1 1415	330	-----	5.2	-----	11.	-----	1643.	-----	-----
1 1502	377	-----	-----	-----	-----	-----	-----	-----	-----
1 1505	380	17.6	-----	113.	-----	2.2E 04	-----	239	-----
1 1515	390	-----	7.2	-----	10.	-----	993.	-----	-----
1 1544	419	-----	-----	-----	-----	-----	-----	-----	-----

----- NO DATA TAKEN

11 NOV 1981

PAGE 4

	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 1	SIDE 2
	AER.N	AER.N	AER.S	AER.S	METHANE	N-C4	N-C4
	PART/CC	PART/CC	UM2/CC	UM2/CC	PPM	PPM	PPM
	TSI-023	TSI-023	TSI-023	TSI-023	BK6800-2	DMS-1	DMS-1
	-----	-----	-----	-----	-----	0.0023	0.0023
	-----	-----	-----	-----	2.35	-----	-----
	-----	-----	-----	-----	-----	-----	0.0645
1.	-----	94.	-----	12.	-----	-----	-----
	-----	-----	-----	-----	-----	0.0164	-----
	400.	-----	1.	-----	2.37	-----	-----
	1.1E 05	-----	203.	-----	2.33	-----	-----
0.	-----	449.	-----	4.	-----	-----	-----
	1.1E 05	-----	1020.	-----	2.33	-----	-----
0.	-----	750.	-----	13.	-----	-----	-----
	6.8E 04	-----	2213.	-----	2.34	-----	-----
1.	-----	633.	-----	43.	-----	-----	-----
	-----	-----	-----	-----	-----	0.0165	-----
	5.6E 04	-----	3327.	-----	2.33	-----	-----
7.	-----	814.	-----	60.	-----	-----	-----
	4.2E 04	-----	3700.	-----	2.33	-----	-----
	-----	-----	-----	-----	-----	-----	0.0627
4.	-----	695.	-----	61.	-----	-----	-----
	3.2E 04	-----	3116.	-----	2.32	-----	-----
1.	-----	1643.	-----	188.	-----	-----	-----
	-----	-----	-----	-----	-----	0.0165	-----
	2.2E 04	-----	2399.	-----	2.32	-----	-----
0.	-----	993.	-----	156.	-----	-----	-----
	-----	-----	-----	-----	-----	-----	0.0613

AFF- 22
JP-4 (PET) VS JP-4 (SHALE)
1980 AUG 6

CLOCK		ELAPSED	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1
TIME		TIME	C5-ISOMS	C5-ISOMS	I-C5	I-C5	N-C5	N-C5	N-C5
			PPM	PPM	PPM	PPM	PPM	PPM	PPM
DY	HR.	(MIN)	SE-52C-2	SE-52C-2	DMS-1	DMS-1	DMS-1	DMS-1	DMS-1
1	617	-148	-----	-----	0.0003	0.0003	0.0000	0.0000	0.0000
1	619	-146	0.0002	0.0002	-----	-----	-----	-----	-----
1	733	-72	-----	0.0290	-----	0.0409	-----	0.0511	-----
1	820	-25	-----	-----	0.0747	-----	0.0794	-----	0.1000
1	825	-20	0.0409	-----	-----	-----	-----	-----	-----
1	917	32	-----	0.0252	-----	-----	-----	-----	-----
1	1004	79	0.0411	-----	-----	-----	-----	-----	-----
1	1114	149	-----	0.0256	-----	-----	-----	-----	-----
1	1203	198	-----	-----	0.0724	-----	0.0772	-----	0.1000
1	1204	199	0.0381	-----	-----	-----	-----	-----	-----
1	1314	269	-----	0.0457	-----	-----	-----	0.0486	-----
1	1404	319	0.0387	-----	-----	-----	-----	-----	-----
1	1454	369	-----	0.0248	-----	-----	-----	-----	-----
1	1502	377	-----	-----	0.0699	-----	0.0740	-----	0.1000
1	1537	412	0.0378	-----	-----	-----	-----	-----	-----
1	1544	419	-----	-----	-----	0.0378	-----	0.0476	-----

----- NO DATA TAKEN

SIDE 1 N-C5 PPM DMS-1	SIDE 2 N-C5 PPM DMS-1	SIDE 1 N-C6 PPM DMS-1	SIDE 1 N-C6 PPM SE-52C-2	SIDE 2 N-C6 PPM DMS-1	SIDE 2 N-C6 PPM SE-52C-2
0.0000	0.0000	0.0000	-----	0.0000	-----
-----	-----	-----	0.0012	-----	0.0012
-----	0.0511	-----	-----	0.0565	0.0566
0.0794	-----	0.1293	-----	-----	-----
-----	-----	-----	0.1229	-----	-----
-----	-----	-----	0.1228	-----	0.0533
-----	-----	-----	-----	-----	0.0537
0.0772	-----	0.1239	-----	-----	-----
-----	-----	-----	0.1227	-----	-----
-----	0.0486	-----	-----	0.0541	0.0513
-----	-----	-----	0.1191	-----	-----
-----	-----	-----	-----	-----	0.0508
0.0740	-----	0.1196	-----	-----	-----
-----	-----	-----	0.1136	-----	-----
-----	0.0476	-----	-----	-----	-----

AFF- 22

JP-4 (PET) VS JP-4 (SHALE)
1980 AUG 6

CLOCK TIME		ELAPSED TIME	SIDE 1 N-C7 PPM	SIDE 2 N-C7 PPM	SIDE 1 N-C8 PPM	SIDE 2 N-C8 PPM	SIDE 1 N-C9 PPM	SIDE 2 N-C9 PPM	SIDE C10 PPM
DY	HR.	(MIN)	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2
1	619	-146	0.0001	0.0001	0.0007	0.0007	0.0001	0.0001	0.0001
1	733	-72	-----	0.0340	-----	0.3010	-----	0.0552	-----
1	825	-20	0.0878	-----	0.7367	-----	0.0542	-----	0.069
1	917	32	-----	0.0323	-----	0.2898	-----	0.0533	-----
1	1004	79	0.0871	-----	0.7233	-----	0.0529	-----	0.068
1	1114	149	-----	0.0326	-----	0.2883	-----	0.0527	-----
1	1204	199	0.0824	-----	0.6710	-----	0.0490	-----	0.062
1	1314	269	-----	0.0311	-----	0.2704	-----	0.0484	-----
1	1404	319	0.0778	-----	0.6298	-----	0.0455	-----	0.058
1	1454	369	-----	0.0279	-----	0.2386	-----	0.0429	-----
1	1537	412	0.0741	-----	0.5985	-----	0.0428	-----	0.055

----- NO DATA TAKEN

SIDE 1 N-C9 PPM	SIDE 2 N-C9 PPM	SIDE 1 C10 PPM	SIDE 2 C10 PPM	SIDE 1 C11 PPM	SIDE 2 C11 PPM
SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2
0.0001	0.0001	0.0011	0.0011	0.0015	0.0015
-----	0.0552	-----	0.1214	-----	0.2201
0.0542	-----	0.0698	-----	0.1140	-----
-----	0.0533	-----	0.1183	-----	0.2193
0.0529	-----	0.0683	-----	0.1096	-----
-----	0.0527	-----	0.1160	-----	0.2108
0.0490	-----	0.0629	-----	0.1005	-----
-----	0.0484	-----	0.1050	-----	0.2018
0.0455	-----	0.0580	-----	0.0906	-----
-----	0.0429	-----	0.0941	-----	0.1697
0.0428	-----	0.0536	-----	0.0806	-----

AFF- 22
 JP-4 (PET) VS JP-4 (SHALE)
 1980 AUG 6

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 C12 RAW DATA SE-52C-2	SIDE 2 C12 RAW DATA SE-52C-2	SIDE 1 TOLUENE PPM SE-52C-2	SIDE 1 TOLUENE PPM 10'C-600	SIDE 2 TOLUENE PPM SE-52C-2	SIDE 2 TOLUENE PPM 10'C-600	SIDE O-XYL PPM 10'C-6
1 617	-148	-----	-----	-----	0.0004	-----	0.0004	0.000
1 619	-146	0.0727	0.0727	0.0011	-----	0.0011	-----	-----
1 733	-72	-----	6.072	-----	-----	0.1255	0.0368	-----
1 820	-25	-----	-----	-----	0.0429	-----	-----	0.009
1 825	-20	4.397	-----	0.2301	-----	-----	-----	-----
1 917	32	-----	6.333	-----	-----	0.1198	-----	-----
1 1004	79	3.707	-----	0.2230	-----	-----	-----	-----
1 1114	149	-----	6.662	-----	-----	0.1202	-----	-----
1 1203	198	-----	-----	-----	0.0385	-----	-----	0.011
1 1204	199	3.594	-----	0.2091	-----	-----	-----	-----
1 1235	230	-----	-----	-----	-----	-----	0.0353	-----
1 1314	269	-----	5.565	-----	-----	0.1139	-----	-----
1 1404	319	3.378	-----	0.1979	-----	-----	-----	-----
1 1454	369	-----	5.360	-----	-----	0.1016	-----	-----
1 1502	377	-----	-----	-----	0.0345	-----	-----	0.008
1 1537	412	2.980	-----	0.1882	-----	-----	-----	-----
1 1544	419	-----	-----	-----	-----	-----	0.0345	-----

----- NO DATA TAKEN

DE 2 UENE PM	SIDE 2 TOLUENE PPM 10'C-600	SIDE 1 O-XYL PPM 10'C-600	SIDE 2 O-XYL PPM 10'C-600	SIDE 1 M+P-XYL PPM 10'C-600	SIDE 2 M+P-XYL PPM 10'C-600
52C-2					
	0.0004	0.0003	0.0003	0.0007	0.0007
0.0011					
0.1255	0.0368		0.0064	0.0431	0.0361
		0.0097			
0.1198					
0.1202		0.0112		0.0346	
	0.0353		0.0057		0.0314
0.1139					
0.1016		0.0089		0.0267	
	0.0345		0.0053		0.0250

AFF- 22

JP-4 (PET) VS JP-4 (SHALE)
1980 AUG 6

CLOCK TIME		ELAPSED TIME	SIDE 1 124TMEBZ RAW DATA SE-52C-2	SIDE 2 124TMEBZ RAW DATA SE-52C-2	SIDE 1 M+P-XYL PPM SE-52C-2	SIDE 2 M+P-XYL PPM SE-52C-2	SIDE 1 CO PPM BK6800-2	SIDE 2 CO PPM BK6800-2	SIDE PPM ECI
DY	HR.	(MIN)							
1	619	-146	472.0	472.0	0.0007	0.0007	-----	-----	0.
1	630	-135	-----	-----	-----	-----	1.86	1.86	---
1	733	-72	-----	1.8E 04	-----	0.0303	-----	-----	---
1	735	-70	-----	-----	-----	-----	-----	-----	---
1	745	-60	-----	-----	-----	-----	-----	1.90	---
1	825	-20	2.4E 04	-----	0.0349	-----	2.10	-----	0.
1	830	-15	-----	-----	-----	-----	-----	-----	---
1	905	20	-----	-----	-----	-----	1.91	-----	---
1	908	23	-----	-----	-----	-----	-----	-----	0.
1	915	30	-----	-----	-----	-----	-----	1.96	---
1	917	32	-----	1.9E 04	-----	0.0288	-----	-----	---
1	1004	79	2.3E 04	-----	0.0335	-----	-----	-----	0.
1	1005	80	-----	-----	-----	-----	1.96	-----	---
1	1015	90	-----	-----	-----	-----	-----	1.84	---
1	1016	91	-----	-----	-----	-----	-----	-----	---
1	1105	140	-----	-----	-----	-----	1.79	-----	0.
1	1114	149	-----	1.8E 04	-----	0.0279	-----	-----	---
1	1115	150	-----	-----	-----	-----	-----	1.89	---
1	1150	185	-----	-----	-----	-----	-----	-----	---
1	1204	199	1.8E 04	-----	0.0294	-----	-----	-----	0.
1	1205	200	-----	-----	-----	-----	1.94	-----	---
1	1214	209	-----	-----	-----	-----	-----	-----	---
1	1215	210	-----	-----	-----	-----	-----	1.92	---
1	1304	259	-----	-----	-----	-----	-----	-----	0.
1	1305	260	-----	-----	-----	-----	2.02	-----	---
1	1314	269	-----	1.5E 04	-----	0.0249	-----	-----	---
1	1315	270	-----	-----	-----	-----	-----	1.98	---
1	1404	319	1.5E 04	-----	0.0258	-----	-----	-----	0.
1	1405	320	-----	-----	-----	-----	2.08	-----	---
1	1414	329	-----	-----	-----	-----	-----	-----	---
1	1415	330	-----	-----	-----	-----	-----	2.05	---
1	1445	360	-----	-----	-----	-----	-----	-----	---
1	1454	369	-----	1.2E 04	-----	0.0210	-----	-----	---
1	1504	379	-----	-----	-----	-----	-----	-----	0.
1	1505	380	-----	-----	-----	-----	2.14	-----	---
1	1515	390	-----	-----	-----	-----	-----	1.26	---
1	1537	412	1.3E 04	-----	0.0237	-----	-----	-----	---
1	1544	419	-----	-----	-----	-----	-----	-----	---

----- NO DATA TAKEN

100

1

11 NOV 1981

PAGE 8

SIDE 1 CO PPM BK6800-2	SIDE 2 CO PPM BK6800-2	SIDE 1 PAN PPM ECD-1	SIDE 2 PAN PPM ECD-1	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA
-----	-----	0.000	0.000	-----	-----
1.86	1.86	-----	-----	-----	-----
-----	-----	-----	0.000	-----	-----
-----	-----	-----	-----	-----	0.025
-----	1.90	-----	-----	-----	-----
2.10	-----	0.000	-----	-----	-----
-----	-----	-----	-----	0.036	-----
1.91	-----	-----	-----	-----	-----
-----	-----	0.000	-----	-----	-----
-----	1.96	-----	-----	-----	-----
-----	-----	-----	0.000	-----	-----
-----	-----	0.000	-----	-----	-----
1.96	-----	-----	-----	-----	-----
-----	1.84	-----	-----	-----	-----
-----	-----	-----	0.000	-----	-----
1.79	-----	0.004	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	1.89	-----	-----	-----	-----
-----	-----	-----	-----	0.061	-----
-----	-----	0.013	-----	-----	-----
1.94	-----	-----	-----	-----	-----
-----	-----	-----	0.002	-----	-----
-----	1.92	-----	-----	-----	0.079
-----	-----	0.018	-----	-----	-----
2.02	-----	-----	-----	-----	-----
-----	-----	-----	0.011	-----	-----
-----	1.98	-----	-----	-----	-----
-----	-----	0.023	-----	-----	-----
2.08	-----	-----	-----	-----	-----
-----	-----	-----	0.022	-----	-----
-----	2.05	-----	-----	-----	-----
-----	-----	-----	-----	-----	0.067
-----	-----	-----	-----	-----	-----
-----	-----	0.020	-----	-----	-----
2.14	-----	-----	-----	-----	-----
-----	1.26	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	0.014	-----	-----

AFF- 22
 JF-4 (PET) VS JF-4 (SHALE)
 1980 AUG 6

CLOCK TIME		ELAPSED TIME	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023	SIDE 1 PART.042 PART/CC TSI-023	SIDE 2 PART.042 PART/CC TSI-023	SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023	SID PART PART TSI-
DY	HR.	(MIN)							
1	745	-60	-----	0.	-----	0.	-----	44.	---
1	825	-20	167.	-----	87.	-----	89.	-----	4
1	905	20	1.0E 05	-----	2166.	-----	178.	-----	
1	915	30	-----	167.	-----	174.	-----	44.	---
1	1005	80	3.8E 04	-----	3.6E 04	-----	3.0E 04	-----	282
1	1015	90	-----	167.	-----	261.	-----	178.	---
1	1105	140	3507.	-----	870.	-----	4.2E 04	-----	2.0
1	1115	150	-----	167.	-----	-87.	-----	44.	---
1	1205	200	-334.	-----	6960.	-----	7504.	-----	3.6
1	1215	210	-----	501.	-----	0.	-----	89.	---
1	1305	260	-1169.	-----	5046.	-----	2442.	-----	2.6
1	1315	270	-----	167.	-----	87.	-----	133.	---
1	1405	320	0.	-----	5481.	-----	-266.	-----	1.7
1	1415	330	-----	167.	-----	435.	-----	44.	---
1	1505	380	1169.	-----	2436.	-----	133.	-----	1.0
1	1515	390	-----	167.	-----	87.	-----	133.	---

----- NO DATA TAKEN

SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023	SIDE 1 PART.133 PART/CC TSI-023	SIDE 2 PART.133 PART/CC TSI-023	SIDE 1 PART.237 PART/CC TSI-023	SIDE 2 PART.237 PART/CC TSI-023
-----	44.	-----	24.	-----	12.
89.	-----	48.	-----	12.	-----
178.	-----	0.	-----	25.	-----
-----	44.	-----	48.	-----	12.
3.0E 04	-----	2820.	-----	184.	-----
-----	178.	-----	145.	-----	0.
4.2E 04	-----	2.0E 04	-----	1365.	-----
-----	44.	-----	434.	-----	61.
7504.	-----	3.6E 04	-----	4945.	-----
-----	89.	-----	48.	-----	135.
2442.	-----	2.6E 04	-----	8905.	-----
-----	133.	-----	169.	-----	98.
-266.	-----	1.7E 04	-----	8524.	-----
-----	44.	-----	410.	-----	480.
133.	-----	1.0E 04	-----	6740.	-----
-----	133.	-----	169.	-----	320.

AFF- 22

JP-4 (PET) VS JP-4 (SHALE)
1980 AUG 6

CLOCK		ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2
TIME	PART.422		PART.422	PART.750	PART.750	
DY HR.			PART/CC TSI-023	PART/CC TSI-023	PART/CC TSI-023	PART/CC TSI-023
1	745	-60	-----	13.	-----	0.
1	825	-20	0.	-----	-4.	-----
1	905	20	0.	-----	0.	-----
1	915	30	-----	7.	-----	-4.
1	1005	80	33.	-----	11.	-----
1	1015	90	-----	0.	-----	0.
1	1105	140	120.	-----	14.	-----
1	1115	150	-----	13.	-----	0.
1	1205	200	354.	-----	39.	-----
1	1215	210	-----	33.	-----	7.
1	1305	260	820.	-----	98.	-----
1	1315	270	-----	33.	-----	7.
1	1405	320	800.	-----	112.	-----
1	1415	330	-----	93.	-----	14.
1	1505	380	827.	-----	95.	-----
1	1515	390	-----	100.	-----	18.

----- NO DATA TAKEN

NOTES

A SUBJECTIVE BASELINE.

AFF- 23
JP-4 (SHALE) VS JP-4 (PETROLEUM)
1980 AUG 7

0618: BAG FILLED WITH PURE AIR.
WET BULB= 18.5 C, DRY BULB= 22 C, R.H.= 72%
0642: 5 ML NO2 INJECTED
0644: 16 ML NO INJECTED
0654: BAG DIVIDED
0709-0724: 370 MICROLITERS JP-4 (PETROLEUM) ADDED TO SIDE 2
0759: 370 MICROLITERS JP-4 (SHALE) ADDED TO SIDE 1
0845: BAG UNCOVERED
0850: WEATHER- HOT, SUNNY.

T=0 AT 845 PST

BAG NO. 16 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	35.8	6.4	DEG C	SIDE 1
T	DORIC-1	36.6	7.0	DEG C	SIDE 2
UV RAD	EPFLEY-1	2.92	0.63	MW/CM2	

ID	INST.	INITIAL CONC.	UNITS	
NO	BENDIX	0.452	PPM	SIDE 1
NO	BENDIX	0.455	PPM	SIDE 2
NO2-UNC	BENDIX	0.153	PPM	SIDE 1
NO2-UNC	BENDIX	0.152	PPM	SIDE 2
THC	BK6800-2	32.40	PPMC	SIDE 1
THC	BK6800-2	31.80	PPMC	SIDE 2

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2750	SE-52C-2	RM-121; 30M SE-52 QUARTZ CAP. GC; FID
1790	D-1790	DASIBI 1790 OZONE MONITOR
1700	BENDIX	AF-LAB BENDIX NO-NOX NYLON FILT ANALYZER
1600	BK6800-2	BECKMAN CO,HC ANALYZER SN:100016
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2100	PN-1	RM-121 POROPAK-N GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
2000	ECD-1	RM-121; 12' 5% CARBOWAX-400 GC; ECD
4130	EPFLEY-1	ARB TRAILER; EPFLEY 11692 UV RADIOMETER

AFF- 23

JP-4 (SHALE) VS JP-4 (PETROLEUM)
1980 AUG 7

CLOCK TIME		ELAPSED TIME	SIDE 1 OZONE PPM	SIDE 2 OZONE PPM	SIDE 1 NO PPM	SIDE 2 NO PPM	SIDE 1 NO2-UNC PPM	SIDE 2 NO2-UNC PPM	SID NOX- PP
DAY	HR.	(MIN)	D-1790	D-1790	BENDIX	BENDIX	BENDIX	BENDIX	BEN
1	635	-130	0.000	0.000	0.025	0.025	0.008	0.008	0.
1	735	-70	-----	0.001	-----	0.455	-----	0.152	---
1	825	-20	0.001	-----	0.452	-----	0.153	-----	0.
1	905	20	0.002	-----	0.417	-----	0.187	-----	0.
1	915	30	-----	0.003	-----	0.336	-----	0.248	---
1	1005	80	0.006	-----	0.277	-----	0.298	-----	0.
1	1015	90	-----	0.047	-----	0.058	-----	0.492	---
1	1105	140	0.026	-----	0.107	-----	0.453	-----	0.
1	1115	150	-----	0.272	-----	0.026	-----	0.419	---
1	1205	200	0.136	-----	0.030	-----	0.482	-----	0.
1	1215	210	-----	0.452	-----	0.028	-----	0.280	---
1	1305	260	0.373	-----	0.024	-----	0.363	-----	0.
1	1315	270	-----	0.565	-----	0.028	-----	0.184	---
1	1405	320	0.556	-----	0.026	-----	0.210	-----	0.
1	1415	330	-----	0.513	-----	0.023	-----	0.132	---
1	1505	380	0.583	-----	0.027	-----	0.134	-----	0.
1	1515	390	-----	0.468	-----	0.028	-----	0.111	---
1	1605	440	0.507	-----	0.031	-----	0.100	-----	0.
1	1615	450	-----	0.477	-----	0.031	-----	0.098	---

----- NO DATA TAKEN

SIDE 1 NO2-UNC PPM BENDIX	SIDE 2 NO2-UNC PPM BENDIX	SIDE 1 NOX-UNC PPM BENDIX	SIDE 2 NOX-UNC PPM BENDIX	SIDE 1 THC PPMC BK6800-2	SIDE 2 THC PPMC BK6800-2
0.008	0.008	0.030	0.030	1.41	1.41
-----	0.152	-----	0.590	-----	31.80
0.153	-----	0.596	-----	32.40	-----
0.187	-----	0.592	-----	31.80	-----
-----	0.248	-----	0.580	-----	31.80
0.298	-----	0.570	-----	31.50	-----
-----	0.492	-----	0.516	-----	30.90
0.453	-----	0.538	-----	30.90	-----
-----	0.419	-----	0.432	-----	29.40
0.482	-----	0.495	-----	30.30	-----
-----	0.280	-----	0.298	-----	27.80
0.363	-----	0.382	-----	28.50	-----
-----	0.184	-----	0.206	-----	26.50
0.210	-----	0.230	-----	27.10	-----
-----	0.132	-----	0.152	-----	25.70
0.134	-----	0.152	-----	26.70	-----
-----	0.111	-----	0.132	-----	25.50
0.100	-----	0.125	-----	26.00	-----
-----	0.098	-----	0.125	-----	24.00

AFF- 23
JP-4 (SHALE) VS JP-4 (PETROLEUM)
1980 AUG 7

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-1	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE #PART PART/ CLIM
1 635	-130	22.1	22.1	-----	0.0	0.0	3.	
1 735	-70	-----	27.4	-----	-----	0.0	-----	
1 825	-20	29.8	-----	-----	0.0	-----	2.	-----
1 900	15	-----	-----	2.79	-----	-----	-----	-----
1 905	20	31.2	-----	2.59	0.3	-----	2.	-----
1 915	30	-----	33.5	2.45	-----	88.0	-----	2
1 1000	75	-----	-----	2.33	-----	-----	-----	-----
1 1005	80	34.7	-----	3.03	17.0	-----	1.	-----
1 1015	90	-----	37.5	3.33	-----	52.0	-----	2
1 1030	105	-----	-----	2.56	-----	-----	-----	-----
1 1100	135	-----	-----	3.50	-----	-----	-----	-----
1 1105	140	38.0	-----	3.31	13.0	-----	1.	-----
1 1115	150	-----	41.2	3.92	-----	36.0	-----	1
1 1130	165	-----	-----	3.21	-----	-----	-----	-----
1 1200	195	-----	-----	4.26	-----	-----	-----	-----
1 1205	200	40.9	-----	3.30	9.0	-----	2.	-----
1 1215	210	-----	43.0	4.03	-----	26.3	-----	7E
1 1230	225	-----	-----	3.75	-----	-----	-----	-----
1 1300	255	-----	-----	3.77	-----	-----	-----	-----
1 1305	260	42.2	-----	3.21	12.8	-----	246.	-----
1 1315	270	-----	42.6	3.48	-----	19.0	-----	26E
1 1330	285	-----	-----	3.37	-----	-----	-----	-----
1 1400	315	-----	-----	2.72	-----	-----	-----	-----
1 1405	320	41.3	-----	2.64	5.5	-----	420.	-----
1 1415	330	-----	41.5	2.65	-----	12.8	-----	309
1 1430	345	-----	-----	2.40	-----	-----	-----	-----
1 1500	375	-----	-----	2.32	-----	-----	-----	-----
1 1505	380	39.5	-----	2.29	4.0	-----	434.	-----
1 1515	390	-----	39.5	2.55	-----	8.0	-----	299
1 1530	405	-----	-----	2.28	-----	-----	-----	-----
1 1600	435	-----	-----	2.29	-----	-----	-----	-----
1 1605	440	38.1	-----	2.08	3.5	-----	429.	-----
1 1615	450	-----	37.8	2.02	-----	5.0	-----	285
1 1630	465	-----	-----	2.20	-----	-----	-----	-----

----- NO DATA TAKEN

SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET
0.0	3.	3.	0.	0.	0.	0.
0.0	-----	1.	-----	0.	-----	0.
-----	2.	-----	0.	-----	0.	-----
-----	-----	-----	-----	-----	-----	-----
-----	2.	-----	0.	-----	0.	-----
88.0	-----	2.	-----	0.	-----	0.
-----	-----	-----	-----	-----	-----	-----
-----	1.	-----	0.	-----	0.	-----
52.0	-----	2.	-----	0.	-----	0.
-----	-----	-----	-----	-----	-----	-----
-----	1.	-----	0.	-----	0.	-----
36.0	-----	1.	-----	0.	-----	0.
-----	-----	-----	-----	-----	-----	-----
-----	2.	-----	0.	-----	0.	-----
26.3	-----	78.	-----	1.	-----	0.
-----	-----	-----	-----	-----	-----	-----
-----	246.	-----	28.	-----	0.	-----
19.0	-----	266.	-----	24.	-----	0.
-----	-----	-----	-----	-----	-----	-----
-----	420.	-----	234.	-----	20.	-----
12.8	-----	309.	-----	48.	-----	-----
-----	-----	-----	-----	-----	-----	-----
-----	434.	-----	280.	-----	45.	-----
8.0	-----	299.	-----	48.	-----	0.
-----	-----	-----	-----	-----	-----	-----
-----	429.	-----	265.	-----	36.	-----
5.0	-----	285.	-----	42.	-----	0.
-----	-----	-----	-----	-----	-----	-----

AFF- 23

JP-4 (SHALE) VS JP-4 (PETROLEUM)
1980 AUG 7

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1 BSCAT 10-4 M-1 MRI-388	SIDE 2 BSCAT 10-4 M-1 MRI-388	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UM3/CC TSI-023	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE AER UM2 TSI-
1 612	-153	-----	-----	-----	-----	-----	-----	---
1 635	-130	0.6	0.6	-1.	-1.	989.	989.	---
1 735	-70	-----	0.7	-----	2.	-----	6579.	---
1 736	-69	-----	-----	-----	-----	-----	-----	---
1 825	-20	0.8	-----	1.	-----	512.	-----	1
1 829	-16	-----	-----	-----	-----	-----	-----	---
1 905	20	0.8	-----	1.	-----	1285.	-----	2
1 915	30	-----	0.8	-----	4.	-----	1.4E 05	---
1 1005	80	0.8	-----	7.	-----	3.5E 04	-----	36
1 1015	90	-----	1.1	-----	27.	-----	9.5E 04	---
1 1105	140	0.7	-----	14.	-----	3.2E 04	-----	73
1 1115	150	-----	2.8	-----	74.	-----	7.3E 04	---
1 1203	198	-----	-----	-----	-----	-----	-----	---
1 1205	200	3.0	-----	36.	-----	2.3E 04	-----	125
1 1215	210	-----	10.4	-----	117.	-----	5.8E 04	---
1 1305	260	12.0	-----	62.	-----	1.7E 04	-----	160
1 1313	268	-----	-----	-----	-----	-----	-----	---
1 1315	270	-----	15.2	-----	119.	-----	4.4E 04	---
1 1405	320	23.2	-----	61.	-----	1.5E 04	-----	143
1 1415	330	-----	15.0	-----	90.	-----	3.1E 04	---
1 1458	373	-----	-----	-----	-----	-----	-----	---
1 1505	380	26.0	-----	69.	-----	9090.	-----	123
1 1515	390	-----	12.4	-----	77.	-----	2.0E 04	---
1 1536	411	-----	-----	-----	-----	-----	-----	---
1 1605	440	20.4	-----	53.	-----	6774.	-----	92
1 1615	450	-----	9.6	-----	445.	-----	1.1E 04	---

----- NO DATA TAKEN

11 NOV 1981

PAGE 4

SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
AER.N	AER.N	AER.S	AER.S	N-C4	N-C4
RT/CC	PART/CC	UM2/CC	UM2/CC	PPM	PPM
I-023	TSI-023	TSI-023	TSI-023	DMS-1	DMS-1
-----	-----	-----	-----	0.0027	0.0027
989.	989.	3.	3.	-----	-----
-----	6579.	-----	99.	-----	-----
-----	-----	-----	-----	-----	0.0155
512.	-----	19.	-----	-----	-----
-----	-----	-----	-----	0.0649	-----
285.	-----	26.	-----	-----	-----
-----	1.4E 05	-----	387.	-----	-----
5.5E 04	-----	365.	-----	-----	-----
-----	9.5E 04	-----	1590.	-----	-----
5.2E 04	-----	739.	-----	-----	-----
-----	7.3E 04	-----	2891.	-----	-----
-----	-----	-----	-----	0.0637	-----
3E 04	-----	1253.	-----	-----	-----
-----	5.8E 04	-----	3618.	-----	-----
7E 04	-----	1600.	-----	-----	-----
-----	-----	-----	-----	-----	0.0152
-----	4.4E 04	-----	3191.	-----	-----
5E 04	-----	1432.	-----	-----	-----
-----	3.1E 04	-----	2384.	-----	-----
-----	-----	-----	-----	0.0605	-----
090.	-----	1231.	-----	-----	-----
-----	2.0E 04	-----	1752.	-----	-----
-----	-----	-----	-----	-----	0.0155
774.	-----	923.	-----	-----	-----
-----	1.1E 04	-----	3156.	-----	-----

2

AFF- 23
JP-4 (SHALE) VS JP-4 (PETROLEUM)
1980 AUG 7

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 C5-ISOMS PPM SE-52C-2	SIDE 2 C5-ISOMS PPM SE-52C-2	SIDE 1 I-C5 PPM DMS-1	SIDE 2 I-C5 PPM DMS-1	SIDE 1 N-C5 PPM DMS-1	SIDE 2 N-C5 PPM DMS-1	SIDE N-C5 PPM SE-52C-2
1 612	-153	-----	-----	0.0004	0.0004	0.0005	0.0005	-----
1 616	-149	0.0003	0.0003	-----	-----	-----	-----	0.0003
1 732	-73	-----	0.0442	-----	-----	-----	-----	-----
1 736	-69	-----	-----	-----	0.0684	-----	0.0733	-----
1 828	-17	0.0261	-----	-----	-----	-----	-----	0.0537
1 829	-16	-----	-----	0.0410	-----	0.0537	-----	-----
1 915	30	-----	0.0371	-----	-----	-----	-----	-----
1 1004	79	0.0264	-----	-----	-----	-----	-----	0.0537
1 1114	149	-----	0.0364	-----	-----	-----	-----	-----
1 1203	198	-----	-----	0.0399	-----	0.0498	-----	-----
1 1204	199	0.0246	-----	-----	-----	-----	-----	0.0537
1 1313	268	-----	-----	-----	0.0627	-----	0.0665	-----
1 1314	269	-----	0.0474	-----	-----	-----	-----	-----
1 1407	322	0.0293	-----	-----	-----	-----	-----	0.0537
1 1451	366	-----	0.0351	-----	-----	-----	-----	-----
1 1458	373	-----	-----	0.0371	-----	0.0473	-----	-----
1 1536	411	-----	-----	-----	0.0661 A	-----	0.0664	-----
1 1542	417	0.0243	-----	-----	-----	-----	-----	0.0537

----- NO DATA TAKEN

SIDE 1 N-C5 PPM DMS-1	SIDE 2 N-C5 PPM DMS-1	SIDE 1 N-C6 PPM SE-52C-2	SIDE 1 N-C6 PPM DMS-1	SIDE 2 N-C6 PPM SE-52C-2	SIDE 2 N-C6 PPM DMS-1
0.0005	0.0005	-----	-----	-----	-----
-----	-----	0.0007	-----	0.0007	-----
-----	-----	-----	-----	0.1201	-----
-----	0.0733	-----	-----	-----	0.1214
-----	-----	0.0554	-----	-----	-----
0.0537	-----	-----	0.0611	-----	-----
-----	-----	-----	-----	0.1181	-----
-----	-----	0.0539	-----	-----	-----
-----	-----	-----	-----	0.1115	-----
0.0498	-----	-----	0.0554	-----	-----
-----	-----	0.0519	-----	-----	-----
-----	0.0665	-----	-----	-----	0.1061
-----	-----	-----	-----	0.1105	-----
-----	-----	0.0501	-----	-----	-----
-----	-----	-----	-----	0.1063	-----
0.0473	-----	-----	0.0507	-----	-----
-----	0.0664	-----	-----	-----	0.1194
-----	-----	0.0527	-----	-----	-----

AFF- 23

JP-4 (SHALE) VS JP-4 (PETROLEUM)
1980 AUG 7

CLOCK TIME	ELAPSED TIME	SIDE 1 N-C7 PPM	SIDE 2 N-C7 PPM	SIDE 1 N-C8 PPM	SIDE 2 N-C8 PPM	SIDE 1 N-C9 PPM	SIDE 2 N-C9 PPM	SIDE C10 PPM
DY HR.	(MIN)	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2
1 616	-149	0.0004	0.0004	0.0044	0.0044	0.0007	0.0007	0.002
1 732	-73	-----	0.0850	-----	0.6957	-----	0.0492	-----
1 828	-17	0.0336	-----	0.2988	-----	0.0550	-----	0.122
1 915	30	-----	0.0790	-----	0.6579	-----	0.0484	-----
1 1004	79	0.0366	-----	0.2910	-----	0.0539	-----	0.120
1 1114	149	-----	0.0775	-----	0.6291	-----	0.0460	-----
1 1204	199	0.0314	-----	0.2765	-----	0.0506	-----	0.114
1 1314	269	-----	0.0729	-----	0.5741	-----	0.0414	-----
1 1407	322	0.0304	-----	0.2603	-----	0.0462	-----	0.100
1 1451	366	-----	0.0688	-----	0.5461	-----	0.0398	-----
1 1542	417	0.0289	-----	0.2482	-----	0.0444	-----	0.096

----- NO DATA TAKEN

11 NOV 1981

PAGE 6

	SIDE 1 N-C9 PPM	SIDE 2 N-C9 PPM	SIDE 1 C10 PPM	SIDE 2 C10 PPM	SIDE 1 C11 PPM	SIDE 2 C11 PPM
-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2
	0.0007	0.0007	0.0026	0.0026	0.0067	0.0067
	-----	0.0492	-----	0.0592	-----	0.0920
	0.0550	-----	0.1226	-----	0.2284	-----
	-----	0.0484	-----	0.0643	-----	0.1058
	0.0539	-----	0.1206	-----	0.2233	-----
	-----	0.0460	-----	0.0592	-----	0.0920
	0.0506	-----	0.1140	-----	0.2117	-----
	-----	0.0414	-----	0.0523	-----	0.0844
	0.0462	-----	0.1006	-----	0.1828	-----
	-----	0.0398	-----	0.0499	-----	0.0745
	0.0444	-----	0.0962	-----	0.1607	-----

AFF- 23
JP-4 (SHALE) VS JP-4 (PETROLEUM)
1980 AUG 7

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 TOLUENE PPM SE-52C-2	SIDE 1 TOLUENE PPM 10'C-600	SIDE 2 TOLUENE PPM SE-52C-2	SIDE 2 TOLUENE PPM 10'C-600	SIDE 1 M+P-XYL PPM 10'C-600	SIDE 2 M+P-XYL PPM 10'C-600	SIDE 124TH RAW D SE-52
1 612	-153	-----	0.0004	-----	0.0004	0.0000	0.0000	----
1 616	-149	0.0017	-----	0.0017	-----	-----	-----	----
1 732	-73	-----	-----	0.2144	-----	-----	-----	----
1 736	-69	-----	-----	-----	0.0376	-----	0.0422	----
1 828	-17	0.1239	-----	-----	-----	-----	-----	2.0E
1 829	-16	-----	0.0372	-----	-----	0.0376	-----	----
1 915	30	-----	-----	0.2022	-----	-----	-----	----
1 1004	79	0.1209	-----	-----	-----	-----	-----	1.9E
1 1114	149	-----	-----	0.1965	-----	-----	-----	----
1 1203	198	-----	0.0131	-----	-----	0.0330	-----	----
1 1204	199	0.1149	-----	-----	-----	-----	-----	1.6E
1 1234	229	-----	-----	-----	0.0359	-----	0.0287	----
1 1314	269	-----	-----	0.1821	-----	-----	-----	----
1 1407	322	0.1104	-----	-----	-----	-----	-----	1.3E
1 1451	366	-----	-----	0.1756	-----	-----	-----	----
1 1458	373	-----	0.0350	-----	-----	0.0274	-----	----
1 1538	413	-----	-----	-----	0.0355	-----	0.0241	----
1 1542	417	0.1063	-----	-----	-----	-----	-----	1.2E

----- NO DATA TAKEN

	SIDE 2 M+P-XYL PPM 10'C-600	SIDE 1 124TMEBZ RAW DATA SE-52C-2	SIDE 2 124TMEBZ RAW DATA SE-52C-2	SIDE 1 M+P-XYL PPM SE-52C-2	SIDE 2 M+P-XYL PPM SE-52C-2
0	0.0000	-----	-----	-----	-----
	-----	-----	-----	0.0006	0.0006
	-----	-----	1.9E 04	-----	0.0318
	0.0422	-----	-----	-----	-----
	-----	2.0E 04	-----	0.0299	-----
	-----	-----	-----	-----	-----
	-----	-----	2.2E 04	-----	0.0312
	-----	1.9E 04	-----	0.0289	-----
	-----	-----	1.7E 04	-----	0.0275
	-----	-----	-----	-----	-----
	-----	1.6E 04	-----	0.0264	-----
	0.0287	-----	-----	-----	-----
	-----	-----	1.4E 04	-----	0.0230
	-----	1.3E 04	-----	0.0233	-----
	-----	-----	1.2E 04	-----	0.0219
	-----	-----	-----	-----	-----
	0.0241	-----	-----	-----	-----
	-----	1.2E 04	-----	0.0217	-----

AFF- 23

JP-4 (SHALE) VS JP-4 (PETROLEUM)
1980 AUG 7

CLOCK TIME		ELAPSED TIME	SIDE 1 CO PPM	SIDE 2 CO PPM	SIDE 1 PAN PPM	SIDE 2 PAN PPM	SIDE 1 HCHO PPM	SIDE 2 HCHO PPM	SID PART PART
DY	HR.	(MIN)	BK6800-2	BK6800-2	ECD-1	ECD-1	CA	CA	TSI-
1	616	-149	-----	-----	0.000	0.000	-----	-----	---
1	635	-130	1.80	1.80	-----	-----	-----	-----	50
1	732	-73	-----	-----	-----	0.000	-----	-----	---
1	735	-70	-----	1.78	-----	-----	-----	0.002	---
1	825	-20	1.86	-----	-----	-----	-----	-----	---
1	826	-19	-----	-----	-----	-----	0.000	-----	---
1	828	-17	-----	-----	0.000	-----	-----	-----	---
1	905	20	1.87	-----	0.000	-----	-----	-----	66
1	915	30	-----	1.89	-----	0.000	-----	-----	---
1	1004	79	-----	-----	0.000	-----	-----	-----	---
1	1005	80	1.87	-----	-----	-----	-----	-----	985
1	1014	89	-----	-----	-----	-----	-----	-----	---
1	1015	90	-----	1.86	-----	-----	-----	-----	---
1	1104	139	-----	-----	-----	-----	-----	-----	---
1	1105	140	1.87	-----	-----	-----	-----	-----	534
1	1114	149	-----	-----	-----	0.006	-----	-----	---
1	1115	150	-----	1.87	-----	-----	-----	-----	---
1	1155	190	-----	-----	-----	-----	0.031	-----	---
1	1204	199	-----	-----	-----	-----	-----	-----	---
1	1205	200	1.88	-----	-----	-----	-----	-----	---
1	1215	210	-----	2.13	-----	-----	-----	-----	---
1	1219	214	-----	-----	-----	0.015	-----	-----	---
1	1224	219	-----	-----	-----	-----	-----	0.065	---
1	1304	259	-----	-----	0.005	-----	-----	-----	---
1	1305	260	1.94	-----	-----	-----	-----	-----	334
1	1314	269	-----	-----	-----	0.021	-----	-----	---
1	1315	270	-----	2.09	-----	-----	-----	-----	---
1	1405	320	2.02	-----	-----	-----	-----	-----	300
1	1407	322	-----	-----	0.010	-----	-----	-----	---
1	1415	330	-----	2.17	-----	-----	-----	-----	---
1	1417	332	-----	-----	-----	0.017	-----	-----	---
1	1500	375	-----	-----	-----	-----	-----	0.138	---
1	1503	378	-----	-----	0.013	-----	-----	-----	---
1	1505	380	2.09	-----	-----	-----	-----	-----	1336
1	1517	388	-----	-----	-----	0.013	-----	-----	---
1	1515	390	-----	2.20	-----	-----	-----	-----	---
1	1525	400	-----	-----	-----	-----	0.096	-----	---
1	1604	439	-----	-----	0.011	-----	-----	-----	---
1	1605	440	2.07	-----	-----	-----	-----	-----	2004
1	1614	449	-----	-----	-----	0.009	-----	-----	---
1	1615	450	-----	2.27	-----	-----	-----	-----	---

----- NO DATA TAKEN

SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPH CA	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023	SIDE 1 PART.042 PART/CC TSI-023	SIDE 2 PART.042 PART/CC TSI-023
-----	-----	-----	-----	-----	-----
-----	-----	501.	501.	87.	87.
-----	-----	-----	-----	-----	-----
-----	0.002	-----	3507.	-----	957.
-----	-----	0.	-----	0.	-----
0.000	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	668.	-----	261.	-----
-----	-----	-----	1.2E 05	-----	1.5E 04
-----	-----	-----	-----	-----	-----
-----	-----	9853.	-----	1.3E 04	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	1.2E 04	-----	2.4E 04
-----	-----	-----	-----	-----	-----
-----	-----	5344.	-----	1914.	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	3006.	-----	1740.
0.031	-----	-----	-----	-----	-----
-----	-----	0.	-----	1566.	-----
-----	-----	-----	6346.	-----	1131.
-----	-----	-----	-----	-----	-----
-----	0.065	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	334.	-----	0.	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	8517.	-----	174.
-----	-----	3006.	-----	696.	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	3173.	-----	2610.
-----	-----	-----	-----	-----	-----
-----	0.138	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	1336.	-----	261.	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	3173.	-----	1740.
0.096	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	2004.	-----	-522.	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	2004.	-----	261.

2

AFF- 23
JP-4 (SHALE) VS JP-4 (PETROLEUM)
1980 AUG 7

CLOCK	ELAPSED	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
TIME	TIME	PART.075	PART.075	PART.133	PART.133	PART.237	PART.237	PART.237	PART.237
DY HR.	(MIN)	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
		TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
1 635	-130	311.	311.	72.	72.	25.	25.		
1 735	-70	-----	1154.	-----	868.	-----	86.	-----	-----
1 825	-20	311.	-----	169.	-----	49.	-----	-----	-20
1 905	20	178.	-----	120.	-----	62.	-----	-----	-----
1 915	30	-----	3685.	-----	241.	-----	37.	-----	-----
1 1005	80	1.1E 04	-----	964.	-----	62.	-----	-----	-----
1 1015	90	-----	5.1E 04	-----	7640.	-----	406.	-----	-----
1 1105	140	1.8E 04	-----	6145.	-----	246.	-----	-----	10
1 1115	150	-----	3.5E 04	-----	3.1E 04	-----	2362.	-----	-----
1 1205	200	4928.	-----	1.5E 04	-----	1488.	-----	-----	80
1 1215	210	-----	6882.	-----	3.7E 04	-----	6347.	-----	-----
1 1305	260	1909.	-----	1.1E 04	-----	4268.	-----	-----	280
1 1315	270	-----	3197.	-----	2.4E 04	-----	7897.	-----	-----
1 1405	320	666.	-----	5037.	-----	4994.	-----	-----	370
1 1415	330	-----	1465.	-----	1.7E 04	-----	6015.	-----	-----
1 1505	380	1465.	-----	1880.	-----	3456.	-----	-----	600
1 1515	390	-----	1021.	-----	8989.	-----	4822.	-----	-----
1 1605	440	488.	-----	1759.	-----	2534.	-----	-----	440
1 1615	450	-----	1243.	-----	5422.	-----	3604.	-----	-----

----- NO DATA TAKEN

NOTES

A JUNK PEAKS OBSCURED BASELINE

SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
PART.237	PART.237	PART.422	PART.422	PART.750	PART.750
PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
25.	25.	0.	0.	-7.	-7.
-----	86.	-----	7.	-----	0.
49.	-----	-20.	-----	4.	-----
62.	-----	-7.	-----	4.	-----
-----	37.	-----	0.	-----	4.
62.	-----	0.	-----	11.	-----
-----	406.	-----	40.	-----	4.
246.	-----	13.	-----	0.	-----
-----	2362.	-----	133.	-----	32.
1488.	-----	80.	-----	14.	-----
-----	6347.	-----	394.	-----	46.
4268.	-----	287.	-----	35.	-----
-----	7897.	-----	534.	-----	56.
4994.	-----	374.	-----	25.	-----
-----	6015.	-----	474.	-----	35.
3456.	-----	607.	-----	84.	-----
-----	4822.	-----	474.	-----	60.
2534.	-----	440.	-----	70.	-----
-----	3604.	-----	-4656.	-----	2710.

2

AFF- 24

NOX - AIR IRRADIATION
1960 AUG 8

0939: BAG FILLED WITH 50% R.H. PURE AIR.
1029: 5 ML NO2 INJECTED
1031: 15 ML NO INJECTED
1033: 0.6 ML PROPANE ADDED
1035: 0.6 ML PROPENE ADDED
1111: BAG DIVIDED
1145: BAG UNCOVERED
NO OZONE OR AEROSOL FORMATION OCCURRED.

RESULTS:	SIDE 1	SIDE 2
-----	-----	-----
CALC. AVG. OH (PPT)	0.093(+-.002)	0.080(+-.005)
CALC. RAD. INPUT (PPB/MIN)	0.27	0.23
-D (NO)/DT (PPB/MIN)	0.86	0.73

CALC. AVG. OH= 30.8 * D LN (PROPENE/PROPANE)/DT
CALC. RAD. INPUT= 16 * (AVG. OH) * (60+MIN. AVG. NO2)
AVG. K1 ESTIMATED FROM RADIOMETER DATA= .35(+-.03)/MIN

T=0 AT 1145 PST

BAG NO. 16 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	40.8	2.8	DEG C	SIDE 1
T	DORIC-1	41.2	2.8	DEG C	SIDE 2
UV RAD	EPPLEY-1	3.22	0.36	MW/CM2	

ID	INST.	INITIAL CONC.	UNITS	
NO	BENDIX	0.461	PPM	SIDE 1
NO	BENDIX	0.461	PPM	SIDE 2
NO2-UNC	BENDIX	0.138	PPM	SIDE 1
NO2-UNC	BENDIX	0.138	PPM	SIDE 2
PROPANE	DMS-1	0.0231	PPM	SIDE 1
PROPANE	DMS-1	0.0231	PPM	SIDE 2
PROPENE	DMS-1	0.0186	PPM	SIDE 1
PROPENE	DMS-1	0.0186	PPM	SIDE 2

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
2100	FN-1	RM-121 POROPAK-N GC; FID
1790	D-1790	DASIBI 1790 OZONE MONITOR
1700	BENDIX	AF-LAB BENDIX NO-NOX NYLON FILT ANALYZER
1600	BK6800-2	BECKMAN CO,HC ANALYZER SN:100016
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
2750	SE-52C-2	RM-121; 30M SE-52 QUARTZ CAP. GC; FID
4130	EPPLEY-1	ARB TRAILER; EPPLEY 11692 UV RAD*OMETER
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

AFF- 24
NOX - AIR IRRADIATION
1980 AUG 8

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	SIDE 1 NO PPM BENDIX	SIDE 2 NO PPM BENDIX	SIDE 1 NO2-UNC PPM BENDIX	SIDE 2 NO2-UNC PPM BENDIX	SIDE 1 NOX-UNC PPM BENDIX	SIDE 2 NOX-UNC PPM BENDIX
1 933	-132	-----	-----	-----	-----	-----	-----	-----
1 940	-125	0.000	-----	-----	-----	-----	-----	-----
1 1045	-60	-----	-----	-----	-----	-----	-----	-----
1 1115	-30	0.000	0.479	-----	0.139	-----	0.598	-----
1 1125	-20	0.000	-----	0.461	-----	0.138	-----	0.58
1 1126	-19	-----	-----	-----	-----	-----	-----	-----
1 1155	10	0.000	-----	0.451	-----	0.143	-----	0.58
1 1204	19	-----	-----	-----	-----	-----	-----	-----
1 1205	20	0.000	0.447	-----	0.142	-----	0.580	-----
1 1215	30	0.000	-----	0.438	-----	0.152	-----	0.57
1 1218	33	-----	-----	-----	-----	-----	-----	-----
1 1225	40	0.000	0.433	-----	0.157	-----	0.576	-----
1 1235	50	0.000	-----	0.423	-----	0.159	-----	0.57
1 1245	60	-----	0.417	-----	0.163	-----	0.568	-----
1 1255	70	0.000	-----	0.414	-----	0.162	-----	0.56
1 1304	79	-----	-----	-----	-----	-----	-----	-----
1 1305	80	0.000	0.400	-----	0.171	-----	0.560	-----
1 1315	90	0.000	-----	0.397	-----	0.171	-----	0.55
1 1325	100	0.000	0.387	-----	0.178	-----	0.556	-----
1 1327	102	-----	-----	-----	-----	-----	-----	-----
1 1335	110	0.000	-----	0.383	-----	0.177	-----	0.54
1 1345	120	0.000	0.366	-----	0.190	-----	0.550	-----
1 1355	130	0.000	-----	0.363	-----	0.190	-----	0.54
1 1404	139	-----	-----	-----	-----	-----	-----	-----
1 1405	140	0.000	0.352	-----	0.197	-----	0.544	-----
1 1415	150	0.000	-----	0.349	-----	0.193	-----	0.53
1 1419	154	-----	-----	-----	-----	-----	-----	-----
1 1500	195	-----	-----	-----	-----	-----	-----	-----
1 1515	210	-----	-----	-----	-----	-----	-----	-----

----- NO DATA TAKEN

SIDE 2 NO2-UNC PPM BENDIX	SIDE 1 NOX-UNC PPM BENDIX	SIDE 2 NOX-UNC PPM BENDIX	SIDE 1 LNC3/C3=	SIDE 2 LNC3/C3=	SIDE 1 HYDROXYL PPT	SIDE 2 HYDROXYL PPT
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	0.2358	0.2358	-----	-----
-----	0.598	-----	0.2384	-----	-----	-----
0.138	-----	0.580	-----	-----	-----	-----
-----	-----	-----	-----	0.2167	-----	0.063
0.143	-----	0.580	-----	-----	-----	-----
-----	-----	-----	0.2733	-----	0.101	-----
-----	0.580	-----	-----	-----	-----	-----
0.152	-----	0.575	-----	-----	-----	-----
-----	-----	-----	-----	0.3238	-----	0.100
-----	0.576	-----	-----	-----	-----	-----
0.159	-----	0.572	-----	-----	-----	-----
-----	0.568	-----	-----	-----	-----	-----
0.162	-----	0.562	-----	-----	-----	-----
-----	-----	-----	0.4700	-----	0.090	-----
-----	0.560	-----	-----	-----	-----	-----
0.171	-----	0.556	-----	-----	-----	-----
-----	0.556	-----	-----	-----	-----	-----
-----	-----	-----	-----	0.5474	-----	0.051
0.177	-----	0.546	-----	-----	-----	-----
-----	0.550	-----	-----	-----	-----	-----
0.190	-----	0.544	-----	-----	-----	-----
-----	-----	-----	0.6446	-----	0.095	-----
-----	0.544	-----	-----	-----	-----	-----
0.193	-----	0.536	-----	-----	-----	-----
-----	-----	-----	-----	0.6339	-----	0.073
-----	-----	-----	0.8165	-----	-----	-----
-----	-----	-----	-----	0.7662	-----	-----

AFF- 24

NOX - AIR IRRADIATION
1980 AUG 8

CLOCK TIME		ELAPSED TIME	SIDE 1 THC PPMC	SIDE 2 THC PPMC	SIDE 1 T DEG C	SIDE 2 T DEG C	SIDE 1 K1 MIN-1	SIDE 2 K1 MIN-1	UV MW EPP
DY	HR.	(MIN)	BK6800-2	BK6800-2	DORIC-1	DORIC-1			
1	940	-125	1.94	1.94	34.8	34.8	-----	-----	--
1	1115	-30	2.04	-----	38.2	-----	-----	-----	--
1	1125	-20	-----	1.95	-----	39.1	-----	-----	--
1	1155	10	-----	2.03	-----	39.1	-----	0.340	3
1	1205	20	2.00	-----	40.0	-----	0.345	-----	3
1	1215	30	-----	1.97	-----	41.8	-----	0.371	3
1	1225	40	1.96	-----	40.9	-----	0.353	-----	3
1	1235	50	-----	1.92	-----	42.4	-----	0.378	3
1	1245	60	1.90	-----	41.8	-----	0.341	-----	3
1	1255	70	-----	1.99	-----	42.3	-----	0.401	3
1	1305	80	1.96	-----	42.5	-----	0.325	-----	3
1	1315	90	-----	1.95	-----	44.0	-----	0.352	3
1	1325	100	0.87	-----	43.0	-----	0.392	-----	3
1	1335	110	-----	1.02	-----	42.8	-----	0.388	3
1	1345	120	1.79	-----	42.7	-----	0.353	-----	3
1	1355	130	-----	1.42	-----	42.6	-----	0.312	2
1	1405	140	1.77	-----	43.0	-----	0.286	-----	2
1	1415	150	-----	1.77	-----	43.0	-----	0.330	2

----- NO DATA TAKEN

SIDE 2 K1 MIN-1	UV RAD MW/CM2 EPPLEY-1	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET
-----	-----	0.1	0.1	2.	2.
-----	-----	0.0	-----	1.	-----
-----	-----	-----	0.0	-----	1.
0.340 D	3.23	-----	0.1	-----	1.
-----	3.28	0.0	-----	1.	-----
0.371	3.52	-----	0.2	-----	1.
-----	3.34	0.0	-----	1.	-----
0.378	3.57	-----	0.2	-----	0.
-----	3.20	0.1	-----	1.	-----
0.401	3.74	-----	0.0	-----	1.
-----	3.01	0.1	-----	1.	-----
0.352	3.23	-----	0.0	-----	1.
-----	3.56	0.9	-----	1.	-----
0.388	3.48	-----	0.0	-----	2.
-----	3.12	0.2	-----	1.	-----
0.312	2.72	-----	0.1	-----	2.
-----	2.45	0.1	-----	2.	-----
0.330	2.78	-----	0.1	-----	2.

2

AFF- 24
NOX - AIR IRRADIATION
1980 AUG 8

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET	SIDE 1 BSCAT 10-4 M-1 MRI-388	SIDE 2 BSCAT 10-4 M-1 MRI-388	SIDE AER.V UM3/C TSI-02
1 940	-125	0.	0.	0.	0.	0.8	0.8	-0.
1 1115	-30	0.	-----	0.	-----	0.4	-----	1.
1 1125	-20	-----	0.	-----	0.	-----	0.6	-----
1 1155	10	-----	0.	-----	0.	-----	0.6	-----
1 1205	20	0.	-----	0.	-----	0.6	-----	1.
1 1215	30	-----	0.	-----	0.	-----	0.6	-----
1 1225	40	0.	-----	0.	-----	0.7	-----	1.
1 1235	50	-----	0.	-----	0.	-----	0.6	-----
1 1245	60	0.	-----	0.	-----	0.7	-----	1.
1 1255	70	-----	0.	-----	0.	-----	0.7	-----
1 1305	80	0.	-----	0.	-----	0.6	-----	1.
1 1315	90	-----	0.	-----	0.	-----	0.8	-----
1 1325	100	0.	-----	0.	-----	0.8	-----	1.
1 1335	110	-----	0.	-----	0.	-----	1.3	-----
1 1345	120	0.	-----	0.	-----	0.9	-----	1.
1 1355	130	-----	0.	-----	0.	-----	1.0	-----
1 1405	140	0.	-----	0.	-----	1.2	-----	1.
1 1415	150	-----	0.	-----	-----	-----	1.2	-----

----- NO DATA TAKEN

SIDE 1 BSCAT 10-4 M-1 MRI-388	SIDE 2 BSCAT 10-4 M-1 MRI-388	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UM3/CC TSI-023	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023
0.8	0.8	-0.	-0.	110.	110.
0.4	-----	1.	-----	145.	-----
-----	0.6	-----	0.	-----	362.
-----	0.6	-----	1.	-----	227.
0.6	-----	1.	-----	65.	-----
-----	0.6	-----	2.	-----	-127.
0.7	-----	1.	-----	862.	-----
-----	0.6	-----	-0.	-----	57.
0.7	-----	1.	-----	1712.	-----
-----	0.7	-----	0.	-----	596.
0.5	-----	1.	-----	1917.	-----
-----	0.8	-----	-0.	-----	461.
0.8	-----	1.	-----	3248.	-----
-----	1.3	-----	0.	-----	988.
0.9	-----	1.	-----	3206.	-----
-----	1.0	-----	0.	-----	1199.
1.2	-----	1.	-----	3240.	-----
-----	1.2	-----	1.	-----	1075.

AFF- 24

NOX - AIR IRRADIATION
1980 AUG 8

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	METHANE PPM PN-1	SIDE 1	SIDE 2	ETHENE PPM PN-1	ETHENE PPM PN-1
		AER.S UM2/CC TSI-023	AER.S UM2/CC TSI-023		METHANE PPM BK6800-2	METHANE PPM BK6800-2		
1 933	-132	-----	-----	2.13	-----	-----	0.0059	0.
1 940	-125	4.	4.	-----	1.93	1.93	-----	---
1 1045	-60	-----	-----	-----	-----	-----	-----	---
1 1115	-30	4.	-----	-----	1.91	-----	-----	---
1 1125	-20	-----	4.	-----	-----	1.90	-----	---
1 1126	-19	-----	-----	-----	-----	-----	-----	---
1 1155	10	-----	9.	-----	-----	1.90	-----	---
1 1204	19	-----	-----	-----	-----	-----	-----	---
1 1205	20	5.	-----	-----	1.91	-----	-----	---
1 1215	30	-----	14.	-----	-----	1.90	-----	---
1 1218	33	-----	-----	-----	-----	-----	-----	---
1 1225	40	14.	-----	-----	1.90	-----	-----	---
1 1235	50	-----	4.	-----	-----	1.89	-----	---
1 1245	60	25.	-----	-----	1.92	-----	-----	---
1 1255	70	-----	10.	-----	-----	1.91	-----	---
1 1304	79	-----	-----	-----	-----	-----	-----	---
1 1305	80	43.	-----	-----	1.88	-----	-----	---
1 1315	90	-----	5.	-----	-----	1.94	-----	---
1 1325	100	39.	-----	-----	1.80	-----	-----	---
1 1327	102	-----	-----	-----	-----	-----	-----	---
1 1335	110	-----	11.	-----	-----	1.92	-----	---
1 1345	120	54.	-----	-----	1.77	-----	-----	---
1 1355	130	-----	14.	-----	-----	1.77	-----	---
1 1404	139	-----	-----	-----	-----	-----	-----	---
1 1405	140	65.	-----	-----	1.80	-----	-----	---
1 1415	150	-----	24.	-----	-----	1.80	-----	---
1 1419	154	-----	-----	-----	-----	-----	-----	---
1 1500	195	-----	-----	-----	-----	-----	-----	---
1 1515	210	-----	-----	-----	-----	-----	-----	---

----- NO DATA TAKEN

	SIDE 2 METHANE PPM BK6800-2	ETHENE PPM PN-1	ETHANE PPM PN-1	ACETYLEN PPH PN-1	SIDE 1 PROPANE PPM DMS-1	SIDE 2 PROPANE PPM DMS-1
	-----	0.0059	0.0105	0.0072	0.0064	0.0064
	1.93	-----	-----	-----	-----	-----
	-----	-----	-----	-----	0.0238	0.0238
	-----	-----	-----	-----	0.0264	-----
	1.90	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	0.0231
	1.90	-----	-----	-----	-----	-----
	-----	-----	-----	-----	0.0230	-----
	-----	-----	-----	-----	-----	-----
	1.90	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	0.0235
	-----	-----	-----	-----	-----	-----
	1.89	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----
	1.91	-----	-----	-----	-----	-----
	-----	-----	-----	-----	0.0232	-----
	-----	-----	-----	-----	-----	-----
	1.94	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	0.0223 A
	1.92	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----
	1.77	-----	-----	-----	-----	-----
	-----	-----	-----	-----	0.0221 A	-----
	-----	-----	-----	-----	-----	-----
	1.80	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	0.0213 A
	-----	-----	-----	-----	0.0224 B	-----
	-----	-----	-----	-----	-----	0.0213 B

AFF- 24
NOX - AIR IRRADIATION
1980 AUG 8

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PROPENE PPM DMS-1	SIDE 2 PROPENE PPM DMS-1	SIDE 1 CO PPM BK6800-2	SIDE 2 CO PPM BK6800-2	HCHO PPM CA	ACETALD PPM 10'C-600	SII PART PART TSI-
1 933	-132	0.0010	0.0010	-----	-----	-----	-----	---
1 940	-125	-----	-----	1.56	1.56	-----	-----	---
1 955	-110	-----	-----	-----	-----	-----	0.0180	---
1 1045	-60	0.0188	0.0188	-----	-----	-----	-----	---
1 1100	-45	-----	-----	-----	-----	0.002	-----	---
1 1115	-30	0.0208	-----	1.44	-----	-----	-----	16
1 1125	-20	-----	-----	-----	1.62	-----	-----	---
1 1126	-19	-----	0.0186	-----	-----	-----	-----	---
1 1155	10	-----	-----	-----	1.56	-----	-----	---
1 1204	19	0.0175	-----	-----	-----	-----	-----	---
1 1205	20	-----	-----	1.56	-----	-----	-----	---
1 1215	30	-----	-----	-----	1.56	-----	-----	---
1 1218	33	-----	0.0170	-----	-----	-----	-----	---
1 1225	40	-----	-----	1.55	-----	-----	-----	50
1 1235	50	-----	-----	-----	1.56	-----	-----	---
1 1245	60	-----	-----	1.60	-----	-----	-----	-66
1 1255	70	-----	-----	-----	1.57	-----	-----	---
1 1304	79	0.0145	-----	-----	-----	-----	-----	---
1 1305	80	-----	-----	1.53	-----	-----	-----	-66
1 1315	90	-----	-----	-----	1.61	-----	-----	---
1 1325	100	-----	-----	1.60	-----	-----	-----	83
1 1327	102	-----	0.0129 A	-----	-----	-----	-----	---
1 1335	110	-----	-----	-----	1.58	-----	-----	---
1 1345	120	-----	-----	1.61	-----	-----	-----	33
1 1355	130	-----	-----	-----	1.58	-----	-----	---
1 1404	139	0.0116 A	-----	-----	-----	-----	-----	---
1 1405	140	-----	-----	1.57	-----	-----	-----	16
1 1415	150	-----	-----	-----	1.36	-----	-----	---
1 1419	154	-----	0.0113 A	-----	-----	-----	-----	---
1 1500	195	0.0099 B	-----	-----	-----	-----	-----	---
1 1515	210	-----	0.0099 B	-----	-----	-----	-----	---

----- NO DATA TAKEN

HCHO PPM CA	ACETALD PPM 10'C-600	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023	SIDE 1 PART.042 PART/CC TSI-023	SIDE 2 PART.042 PART/CC TSI-023
-----	-----	-----	-----	-----	-----
-----	-----	0.	0.	-87.	-87.
-----	0.0180	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
0.002	-----	-----	-----	-----	-----
-----	-----	167.	-----	-87.	-----
-----	-----	-----	334.	-----	-174.
-----	-----	-----	-----	-----	-----
-----	-----	-----	167.	-----	0.
-----	-----	-----	-----	-----	-----
-----	-----	0.	-----	0.	-----
-----	-----	-----	-167.	-----	0.
-----	-----	-----	-----	-----	-----
-----	-----	501.	-----	87.	-----
-----	-----	-----	-835.	-----	696.
-----	-----	-668.	-----	1740.	-----
-----	-----	-----	334.	-----	0.
-----	-----	-----	-----	-----	-----
-----	-----	-668.	-----	1218.	-----
-----	-----	-----	0.	-----	87.
-----	-----	835.	-----	783.	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	0.	-----	609.
-----	-----	334.	-----	783.	-----
-----	-----	-----	167.	-----	522.
-----	-----	-----	-----	-----	-----
-----	-----	167.	-----	609.	-----
-----	-----	-----	-167.	-----	609.
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----

AFF - 24

NOX - AIR IRRADIATION
1980 AUG 8

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
		PART.075 PART/CC TSI-023	PART.075 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART.237 PART/CC TSI-023	PART.237 PART/CC TSI-023	PART.237 PART/CC TSI-023	PART.237 PART/CC TSI-023
1 940	-125	133.	133.	48.	48.	12.	12.		
1 1115	-30	44.	-----	24.	-----	0.	-----		
1 1125	-20	-----	178.	-----	24.	-----	0.		
1 1155	10	-----	44.	-----	0.	-----	12.		
1 1205	20	44.	-----	24.	-----	0.	-----		
1 1215	30	-----	44.	-----	-24.	-----	12.		
1 1225	40	222.	-----	48.	-----	0.	-----		
1 1235	50	-----	133.	-----	72.	-----	-12.		
1 1245	60	577.	-----	48.	-----	25.	-----		-1
1 1255	70	-----	178.	-----	72.	-----	12.		
1 1305	80	1066.	-----	289.	-----	12.	-----		
1 1315	90	-----	311.	-----	72.	-----	-12.		
1 1325	100	1510.	-----	120.	-----	0.	-----		
1 1335	110	-----	355.	-----	24.	-----	0.		
1 1345	120	1776.	-----	313.	-----	0.	-----		
1 1355	130	-----	444.	-----	48.	-----	25.		
1 1405	140	2042.	-----	410.	-----	12.	-----		
1 1415	150	-----	533.	-----	96.	-----	0.		

----- NO DATA TAKEN

NOTES

- A SOMETHING WAS WRONG WITH THE RETENTION TIMES; CARRIER GAS FLOW WAS INCORRECT
- B CARRIER FLOW HAS BEEN RESET TO CORRECT VALUE FOR THOSE LAST TWO SAMPLES
- C EPPLEY UV RADIOMETER PLACED UNDER BAG ON SIDE BEING SAMPLED
- D K1 CALCULATED FROM UV RADIOMETER DATA

	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
	PART.237	PART.237	PART.422	PART.422	PART.750	PART.750
	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
	12.	12.	7.	7.	-4.	-4.
	0.	-----	-7.	-----	4.	-----
	-----	0.	-----	0.	-----	0.
	-----	12.	-----	0.	-----	4.
	0.	-----	-7.	-----	4.	-----
	-----	12.	-----	0.	-----	7.
	0.	-----	0.	-----	4.	-----
	-----	-12.	-----	7.	-----	-4.
	25.	-----	-13.	-----	4.	-----
	-----	12.	-----	0.	-----	0.
	12.	-----	0.	-----	0.	-----
	-----	-12.	-----	7.	-----	-4.
	0.	-----	0.	-----	0.	-----
	-----	0.	-----	0.	-----	0.
	0.	-----	0.	-----	0.	-----
	-----	25.	-----	-7.	-----	0.
	12.	-----	0.	-----	0.	-----
	-----	0.	-----	0.	-----	4.

CARRIER GAS FLOW WAS

FOR THOSE LAST TWO SAMPLES,
BEING SAMPLED

AFF- 25
JP-4 (PETROLEUM); 4 DAY
1980 AUG 12-15

DAY 1 (AUGUST 12)

0700: BAG FILLED WITH PURE AIR.
WET BULB= 13 C, DRY BULB= 27 C, R.H.= 18%
0708: 5 ML NO2 INJECTED
0710: 15 ML NO INJECTED
0713: 60 ML FREON 12 ADDED
0716-0719: 370 MICROLITERS JP-4 (PETROLEUM) ADDED
0730-0745: 370 ADDITIONAL MICROLITERS JP-4(PETROLEUM) ADDED.
0830: BAG UNCOVERED

DAY 2 (AUGUST 13)

0746: BAG FILLED WITH ADDITIONAL PURE AIR
DILUTION FACTOR= 0.178

DAY 3 (AUGUST 14)

0750: BAG FILLED WITH PURE AIR
DILUTION FACTOR = 0.47
0818-0833: 7.5 ML NO INJECTED
0833-0848: 2.5 ML NO2 INJECTED

DAY 4 (AUGUST 15)

0757: BAG FILLED WITH PURE AIR.
DILUTION FACTOR= 0.57

RESULTS:	AVG.T (DEG.C)	AVG.UV (MW/CM2)
DAY 1	39 (+-3)	3.0(+0.5)
DAY 2	31 (+-6)	2.6(+0.9)
DAY 3	29 (+-5)	2.5(+1.0)
DAY 4	30 (+-5)	3.1(+0.8)

T=0 AT 830 PST

BAG NO. 16 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	31.8	6.1	DEG C
UV RAD	EPPLEY-1	2.80	0.84	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	BENDIX	0.342	PPM
NO2-UNC	BENDIX	0.135	PPM
THC	BK6800-2	25.40	PPMC

AFF- 25

JP-4 (PETROLEUM); 4 DAY
1980 AUG 12-15

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
2750	SE-52C-2	RM-121; 30M SE-52 QUARTZ CAP. GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
1790	D-1790	DASIBI 1790 OZONE MONITOR
1700	BENDIX	AF-LAB BENDIX NO-NOX NYLON FILT ANALYZER
1600	BK6800-2	BECKMAN CO,HC ANALYZER SN:100016
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
2000	ECD-1	RM-121; 12' 5% CARBOWAX-400 GC; ECD
4130	EPPLEY-1	ARB TRAILER; EPPLEY 11692 UV RADIOMETER

AFF- 25
JP-4 (PETROLEUM); 4 DAY
1980 AUG 12-15

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM BENDIX	NO2-UNC PPM BENDIX	NOX-UNC PPM BENDIX	THC PPMC BK6800-2	T DEG C DORIC-1	UV R MW/C EPPLE
1 621	-129	-----	-----	-----	-----	-----	-----	-----
1 630	-120	0.000	0.008	0.002	0.006	1.66	25.1	-----
1 756	-34	-----	-----	-----	-----	-----	-----	-----
1 800	-30	0.002	0.342	0.135	0.483	25.40	30.0	-----
1 905	35	0.015	0.263	0.195	0.469	25.40	34.0	2.8
1 1005	95	0.047	0.070	0.368	0.430	25.00	36.8	3.0
1 1105	155	0.296	0.011	0.362	0.353	23.40	40.8	3.3
1 1205	215	0.659	0.009	0.268	0.262	22.50	42.0	3.1
1 1207	217	-----	-----	-----	-----	-----	-----	-----
1 1305	275	0.874	0.006	0.192	0.190	21.00	42.8	3.7
1 1405	335	0.930	0.009	0.127	0.128	20.70	41.8	2.5
1 1505	395	0.909	0.009	0.098	0.100	20.60	38.5	2.8
1 1605	455	0.875	0.000	0.088	0.084	20.50	35.4	2.1
2 725	1375	-----	-----	-----	-----	-----	-----	-----
2 730	1380	0.613	0.008	0.036	0.041	19.70	21.2	1.0
2 930	1500	-----	-----	-----	-----	-----	-----	-----
2 935	1505	0.097	0.000	0.008	0.008	4.35	23.8	1.6
2 1005	1535	0.098	0.001	0.009	0.010	4.47	26.0	2.2
2 1105	1595	0.111	0.003	0.013	0.013	4.35	30.6	3.5
2 1205	1655	0.130	0.000	0.016	0.015	4.42	34.4	3.8
2 1206	1656	-----	-----	-----	-----	-----	-----	-----
2 1305	1715	0.155	0.002	0.017	0.019	3.88	36.6	3.4
2 1405	1775	0.176	0.004	0.020	0.022	4.27	37.5	3.1
2 1505	1835	0.194	0.003	0.020	0.023	4.22	36.4	2.4
2 1605	1895	0.200	0.009	0.020	0.025	4.29	32.6	2.2
3 722	2812	-----	-----	-----	-----	-----	-----	-----
3 725	2815	0.158	0.007	0.011	0.017	4.17	20.6	0.8
3 906	2916	-----	-----	-----	-----	-----	-----	-----
3 915	2925	0.003	0.093	0.120	0.208	2.49	22.2	1.3
3 1005	2975	0.009	0.084	0.123	0.205	2.47	24.8	1.9
3 1105	3035	0.017	0.071	0.137	0.198	2.50	28.6	2.8
3 1205	3095	0.039	0.047	0.157	0.196	2.61	31.4	3.9
3 1305	3155	0.063	0.029	0.167	0.188	2.41	33.4	3.6
3 1405	3215	0.093	0.019	0.169	0.178	2.37	34.1	3.0
3 1505	3275	0.120	0.015	0.162	0.168	2.30	33.5	2.8
3 1605	3335	0.136	0.016	0.161	0.166	2.37	31.0	2.4
4 721	4251	-----	-----	-----	-----	-----	-----	-----
4 725	4255	0.056	0.010	0.052	0.057	2.23	21.4	1.7
4 901	4351	-----	-----	-----	-----	-----	-----	-----
4 905	4355	0.058	0.003	0.024	0.025	1.73	24.1	2.6
4 1005	4415	0.100	0.003	0.025	0.026	1.81	29.1	3.4
4 1105	4475	0.146	0.006	0.028	0.031	1.81	33.0	3.9
4 1205	4535	0.186	0.007	0.029	0.033	1.82	34.0	4.1
4 1206	4536	-----	-----	-----	-----	-----	-----	-----
4 1305	4595	0.223	0.008	0.031	0.036	1.84	35.4	3.9
4 1405	4655	0.249	0.010	0.032	0.038	1.70	34.0	2.8
4 1505	4715	0.262	0.009	0.032	0.038	1.75	31.5	2.5
4 1506	4716	-----	-----	-----	-----	-----	-----	-----
4 1605	4775	-----	0.009	0.032	0.040	1.79	29.0	2.8

----- NO DATA TAKEN

THC PPMC BK6800-2	T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-1	FREON 12 RAW DATA DMS-1	CONDENS 10E3/CC CNC-143	#PART>.3 PART/CC CLIMET	#PART>.5 PART/CC CLIMET
-----	-----	-----	0.0000	-----	-----	-----
1.66	25.1	-----	-----	0.3	3.	0.
-----	-----	-----	81.02	-----	-----	-----
25.40	30.0	-----	-----	0.6	3.	0.
25.40	34.0	2.86	-----	73.0	2.	0.
25.00	36.8	3.07	-----	43.0	3.	0.
23.40	40.8	3.35	-----	32.0	3.	0.
22.50	42.0	3.18	-----	24.0	4.	0.
-----	-----	-----	77.82	-----	-----	-----
21.00	42.8	3.71	-----	1805.	117.	1.
20.70	41.8	2.56	-----	13.8	228.	14.
20.60	38.5	2.84	74.50	11.5	257.	27.
20.50	35.4	2.14	-----	7.5	264.	32.
-----	-----	-----	79.62	-----	-----	-----
19.70	21.2	1.00	-----	0.0	14.	0.
-----	-----	-----	14.14	-----	-----	-----
4.35	23.8	1.66	-----	1.5	4.	0.
4.47	26.0	2.24	-----	0.2	4.	0.
4.35	30.6	3.50	-----	4.2	6.	0.
4.42	34.4	3.86	-----	3.6	6.	0.
-----	-----	-----	14.05	-----	-----	-----
3.88	36.6	3.40	-----	2.6	6.	0.
4.27	37.5	3.10	-----	1.8	5.	0.
4.22	36.4	2.48	14.37	1.5	4.	0.
4.29	32.6	2.29	-----	1.2	2.	0.
-----	-----	-----	14.69	-----	-----	-----
4.17	20.6	0.85	-----	0.3	4.	0.
-----	-----	-----	6.912	-----	-----	-----
2.49	22.2	1.30	-----	0.2	1.	0.
2.47	24.8	1.96	-----	0.2	1.	0.
2.50	28.6	2.81	-----	0.2	2.	0.
2.61	31.4	3.92	6.672	0.2	2.	0.
2.41	33.4	3.64	-----	0.3	2.	0.
2.37	34.1	3.09	-----	0.3	4.	1.
2.30	33.5	2.83	6.528	0.3	3.	0.
2.37	31.0	2.41	-----	0.4	2.	0.
-----	-----	-----	6.272	-----	-----	-----
2.23	21.4	1.74	-----	0.5	4.	0.
-----	-----	-----	3.584	-----	-----	-----
1.73	24.1	2.61	-----	0.1	2.	0.
1.81	29.1	3.40	-----	2.5	2.	0.
1.81	33.0	3.93	-----	2.4	2.	0.
1.82	34.0	4.17	-----	2.2	2.	0.
-----	-----	-----	3.480	-----	-----	-----
1.84	35.4	3.95	-----	1.5	3.	0.
1.70	34.0	2.86	-----	1.4	3.	0.
1.75	31.5	2.59	-----	1.4	3.	0.
-----	-----	-----	3.376	-----	-----	-----
1.79	29.0	2.80	-----	1.2	3.	0.

AFF- 25

JP-4 (PETROLEUM); 4 DAY
1980 AUG 12-15

CLOCK	ELAPSED	#PART>1	BSCAT	AER.V	AER.N	AER.S	N-C4	C5-19
TIME	TIME	PART/CC	10-4 M-1	UM3/CC	PART/CC	UM2/CC	PPM	PPM
BY HR.	(MIN)	CLIMET	MRI-388	TSI-023	TSI-023	TSI-023	DMS-1	SE-52
1 621	-129	-----	-----	-----	-----	-----	0.0034	-----
1 623	-127	-----	-----	-----	-----	-----	-----	0.00
1 630	-120	0.	0.8	-----	-----	-----	-----	-----
1 756	-34	-----	-----	-----	-----	-----	0.0140	0.00
1 800	-30	0.	0.8	-----	-----	-----	-----	-----
1 904	34	-----	-----	-----	-----	-----	-----	0.00
1 905	35	0.	0.9	-----	-----	-----	-----	-----
1 1004	94	-----	-----	-----	-----	-----	-----	0.01
1 1005	95	0.	1.1	31.	6.5E 04	1440.	-----	-----
1 1104	154	-----	-----	-----	-----	-----	-----	0.00
1 1105	155	0.	1.7	72.	5.8E 04	2507.	-----	-----
1 1205	215	0.	5.2	152.	4.5E 04	3681.	-----	-----
1 1207	217	-----	-----	-----	-----	-----	0.0133	0.00
1 1305	275	0.	10.8	191.	3.5E 04	3844.	-----	0.00
1 1404	334	-----	-----	-----	-----	-----	-----	0.00
1 1405	335	0.	12.8	180.	2.3E 04	3312.	-----	-----
1 1505	395	0.	12.0	154.	1.7E 04	2714.	0.0123	0.00
1 1605	455	0.	11.0	125.	1.3E 04	2131.	-----	-----
2 725	1375	-----	-----	-----	-----	-----	0.0133	0.00
2 730	1380	0.	0.8	0.	77.	2.	-----	-----
2 930	1500	-----	-----	-----	-----	-----	0.0038	0.00
2 935	1505	0.	0.8	3.	1983.	53.	-----	-----
2 1005	1535	0.	0.7	4.	1953.	65.	-----	-----
2 1104	1594	-----	-----	-----	-----	-----	-----	0.00
2 1105	1595	0.	0.8	5.	6932.	142.	-----	-----
2 1205	1655	0.	0.8	9.	7112.	265.	-----	-----
2 1206	1656	-----	-----	-----	-----	-----	0.0039	0.00
2 1305	1715	0.	1.0	11.	5500.	290.	-----	0.00
2 1405	1775	0.	1.1	8.	2298.	228.	-----	0.00
2 1505	1835	0.	1.1	12.	4131.	250.	0.0038	0.00
2 1605	1895	0.	1.0	6.	2340.	136.	-----	-----
3 722	2812	-----	-----	-----	-----	-----	0.0039	0.00
3 725	2815	0.	0.5	2.	2007.	31.	-----	-----
3 906	2916	-----	-----	-----	-----	-----	0.0028	0.00
3 915	2925	0.	0.4	1.	-75.	3.	-----	-----
3 1005	2975	0.	0.4	1.	-73.	5.	-----	0.00
3 1104	3034	-----	-----	-----	-----	-----	-----	0.00
3 1105	3035	0.	0.4	-0.	-E6.	0.	-----	-----
3 1205	3095	0.	0.4	1.	565.	13.	0.0027	-----
3 1305	3155	0.	0.4	2.	=64370	164.	-----	0.00
3 1404	3214	-----	-----	-----	-----	-----	-----	0.00
3 1405	3215	0.	0.5	-3.	-12.	-20.	-----	-----
3 1505	3275	0.	0.6	1.	423.	17.	0.0025	-----
3 1553	3323	-----	-----	-----	-----	-----	-----	0.00
3 1605	3335	0.	0.6	0.	814.	10.	-----	-----
4 721	4251	-----	-----	-----	-----	-----	0.0026	0.00
4 725	4255	0.	0.5	-0.	295.	3.	-----	-----
4 901	4351	-----	-----	-----	-----	-----	0.0021	0.00
4 905	4355	0.	0.5	0.	169.	1.	-----	-----
4 1004	4414	-----	-----	-----	-----	-----	-----	0.00

----- NO DATA TAKEN

	AER.S UM2/CC TSI-023	N-C4 PPM DMS-1	C5-ISOMS PPM SE-52C-2	I-C5 PPM DMS-1	N-C5 PPM DMS-1	N-C6 PPM SE-52C-2	N-C6 PPM DMS-1
	-----	0.0034	-----	0.0014	0.0004	-----	0.0000
	-----	-----	0.0001	-----	-----	0.0001	-----
	-----	-----	-----	-----	-----	-----	-----
	-----	0.0140	0.0117	0.0582	0.0617	0.0305	0.1014
	-----	-----	-----	-----	-----	-----	-----
	-----	-----	0.0090	-----	-----	0.0268	-----
	-----	-----	-----	-----	-----	-----	-----
	-----	-----	0.0100	-----	-----	0.0355	-----
04	1440.	-----	-----	-----	-----	-----	-----
	-----	-----	0.0083	-----	-----	0.0251	-----
04	2507.	-----	-----	-----	-----	-----	-----
04	3681.	-----	-----	-----	-----	-----	-----
	-----	0.0133	0.0115	0.0545	0.0585	0.0283	0.0942
04	3844.	-----	0.0069	-----	-----	0.0224	-----
	-----	-----	0.0088	-----	-----	0.0220	-----
04	3312.	-----	-----	-----	-----	-----	-----
04	2714.	0.0123	0.0091	0.0520	0.0564	0.0268	0.0859
04	2131.	-----	-----	-----	-----	-----	-----
	-----	0.0133	0.0092	0.0525	0.0562	0.0269	0.0985
	2.	-----	-----	-----	-----	-----	-----
	-----	0.0038	0.0017	0.0088	0.0093	0.0049	0.0146
	53.	-----	-----	-----	-----	-----	-----
	65.	-----	-----	-----	-----	-----	-----
	-----	-----	0.0015	-----	-----	0.0044	-----
	142.	-----	-----	-----	-----	-----	-----
	265.	-----	-----	-----	-----	-----	-----
	-----	0.0039	0.0025	0.0087	0.0090	0.0040	0.0141
	290.	-----	0.0011	-----	-----	0.0031	-----
	228.	-----	0.0012	-----	-----	0.0033	-----
	250.	0.0038	0.0022	0.0083	0.0089	0.0043	0.0136
	136.	-----	-----	-----	-----	-----	-----
	-----	0.0039	0.0017	0.0084	0.0090	0.0046	0.0139
	31.	-----	-----	-----	-----	-----	-----
	-----	0.0028	0.0007	0.0033	0.0034	0.0018	0.0052
	3.	-----	-----	-----	-----	-----	-----
	5.	-----	0.0006	-----	-----	0.0015	-----
	-----	-----	0.0005	-----	-----	0.0016	-----
	0.	-----	-----	-----	-----	-----	-----
	13.	0.0027	-----	0.0032	0.0033	-----	0.0052
	164.	-----	0.0005	-----	-----	0.0013	-----
	-----	-----	0.0005	-----	-----	0.0014	-----
	-20.	-----	-----	-----	-----	-----	-----
	17.	0.0025	-----	0.0029	0.0031	-----	0.0052
	-----	-----	0.0004	-----	-----	0.0012	-----
	10.	-----	-----	-----	-----	-----	-----
	-----	0.0026	0.0005	0.0028	0.0030	0.0015	0.0041
	3.	-----	-----	-----	-----	-----	-----
	-----	0.0021	0.0002	0.0006	0.0012	0.0005	0.0016
	1.	-----	-----	-----	-----	-----	-----
	-----	-----	0.0002	-----	-----	0.0004	-----

AFF- 25
 JP-4 (PETROLEUM); 4 DAY
 1980 AUG 12-15

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	#PART>1 PART/CC CLIMET	BSCAT 10-4 M-1 MRI-388	AER.V UM3/CC TSI-023	AER.N PART/CC TSI-023	AER.S UM2/CC TSI-023	N-C4 PPM DMS-1	C5-I PP SE-5
4 1005	4415	0.	0.6	2.	3866.	73.	-----	---
4 1105	4475	0.	0.5	4.	3614.	128.	-----	---
4 1106	4476	-----	-----	-----	-----	-----	-----	0.0
4 1205	4535	0.	0.6	4.	3666.	145.	-----	---
4 1206	4536	-----	-----	-----	-----	-----	0.0020	0.0
4 1305	4595	0.	0.7	5.	3117.	154.	-----	---
4 1307	4597	-----	-----	-----	-----	-----	-----	---
4 1405	4655	0.	0.8	7.	2108.	159.	-----	---
4 1407	4657	-----	-----	-----	-----	-----	-----	0.0
4 1505	4715	0.	0.8	5.	2193.	127.	-----	---
4 1506	4716	-----	-----	-----	-----	-----	0.0018	0.0
4 1605	4775	0.	0.7	5.	1534.	112.	-----	---

----- NO DATA TAKEN

	N-C4 PPM DMS-1	C5-ISOMS PPM SE-52C-2	I-C5 PPM DMS-1	N-C5 PPM DMS-1	N-C6 PPM SE-52C-2	N-C6 PPM DMS-1
3.	-----	-----	-----	-----	-----	-----
2/CC	-----	-----	-----	-----	-----	-----
023	-----	-----	-----	-----	-----	-----
73.	-----	-----	-----	-----	-----	-----
28.	-----	0.0001	-----	-----	0.0005	-----
45.	-----	-----	-----	-----	-----	-----
---	0.0020	0.0002	0.0010	0.0010	0.0004	0.0012
54.	-----	-----	-----	-----	-----	-----
---	-----	-----	-----	-----	0.0003	-----
59.	-----	-----	-----	-----	-----	-----
---	-----	0.0004	-----	-----	0.0003	-----
27.	-----	-----	-----	-----	-----	-----
---	0.0018	0.0001	0.0008	0.0010	0.0003	0.0007
12.	-----	-----	-----	-----	-----	-----

2

AFF- 25

JP-4 (PETROLEUM); 4 DAY
1980 AUG 12-15

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	N-C7 PPM SE-52C-2	N-C8 PPM SE-52C-2	N-C9 PPM SE-52C-2	C10 PPM SE-52C-2	C11 PPM SE-52C-2	TOLUENE PPM SE-52C-2	TO 10
1 621	-129	-----	-----	-----	-----	-----	-----	0
1 623	-127	0.0000	0.0002	0.0000	0.0004	0.0007	0.0003	-
1 756	-34	0.0214	0.1742	0.0120	0.0138	0.0201	0.0550	0
1 842	12	-----	-----	-----	-----	-----	-----	-
1 904	34	0.0192	0.1585	0.0113	0.0138	0.0214	0.0501	-
1 1004	94	0.0193	0.1588	0.0113	0.0139	0.0214	0.0501	-
1 1104	154	0.0176	0.1445	0.0105	0.0133	0.0207	0.0459	-
1 1207	217	0.0190	0.1491	0.0107	0.0129	0.0192	0.0486	0
1 1305	275	0.0150	0.1211	0.0088	0.0108	0.0165	0.0389	-
1 1404	334	0.0148	0.1181	0.0084	0.0105	0.0155	0.0382	-
1 1405	335	-----	-----	-----	-----	-----	-----	-
1 1505	395	0.0179	0.1389	0.0099	0.0119	0.0175	0.0451	0
2 725	1375	0.0184	0.1401	0.0095	0.0110	0.0151	0.0459	-
2 930	1500	0.0034	0.0261	0.0019	0.0022	0.0063	0.0084	0
2 1104	1594	0.0029	0.0221	0.0015	0.0017	0.0026	0.0074	-
2 1206	1656	0.0026	0.0202	0.0015	0.0016	0.0026	0.0067	0
2 1305	1715	0.0022	0.0171	0.0012	0.0014	0.0021	0.0056	-
2 1405	1775	0.0024	0.0182	0.0015	0.0017	0.0027	0.0061	-
2 1505	1835	0.0029	0.0220	0.0016	0.0018	0.0026	0.0071	0
3 722	2812	0.0030	0.0220	0.0015	0.0019	0.0024	0.0074	0
3 904	2916	0.0012	0.0089	0.0006	0.0007	0.0010	0.0030	0
3 1005	2975	0.0010	0.0077	0.0005	0.0006	0.0009	0.0025	-
3 1104	3034	0.0010	0.0079	0.0005	0.0006	0.0009	0.0026	-
3 1205	3095	-----	-----	-----	-----	-----	-----	0
3 1305	3155	0.0009	0.0068	0.0005	0.0006	0.0009	0.0022	-
3 1404	3214	0.0009	0.0071	0.0005	0.0006	0.0009	0.0023	-
3 1505	3275	-----	-----	-----	-----	-----	-----	0
3 1553	3323	0.0008	0.0054	0.0005	0.0005	0.0007	0.0021	-
4 721	4251	0.0008	0.0057	0.0004	0.0006	0.0008	0.0022	0
4 901	4351	0.0003	0.0022	0.0002	0.0002	0.0003	0.0012	0
4 1004	4414	0.0003	0.0020	0.0002	0.0002	0.0003	0.0008	-
4 1106	4476	0.0003	0.0019	0.0002	0.0002	0.0003	0.0007	-
4 1206	4536	0.0001	-----	-----	0.0001	0.0003	0.0005	0
4 1307	4597	0.0002	0.0011	-----	-----	0.0001	0.0005	-
4 1407	4657	0.0002	0.0012	-----	0.0001	0.0002	0.0004	-
4 1506	4716	0.0001	0.0011	0.0001	0.0001	0.0002	0.0004	0

----- NO DATA TAKEN

11 NOV 1981

PAGE 6

0 M 20-2	C11 PPM SE-52C-2	TOLUENE PPM SE-52C-2	TOLUENE PPM 10'C-600	O-XYL PPM 10'C-600	M+P-XYL PPM 10'C-600	124TMEBZ RAW DATA SE-52C-2	M+P-XYL PPM SE-52C-2
---	-----	-----	0.0005	0.0000	0.0000	-----	-----
004	0.0007	0.0003	-----	-----	-----	-----	0.0001
138	0.0201	0.0550	0.0317	0.0000	0.0342	4433.	0.0079
---	-----	-----	-----	0.0260	-----	-----	-----
138	0.0214	0.0501	-----	-----	-----	4503.	0.0074
139	0.0214	0.0501	-----	-----	-----	4524.	0.0073
133	0.0207	0.0459	-----	-----	-----	4039.	0.0065
129	0.0192	0.0486	0.0328	0.0209	0.0271	3623.	0.0064
108	0.0165	0.0389	-----	-----	-----	2924.	0.0052
105	0.0155	0.0382	-----	-----	-----	2644.	0.0048
---	-----	-----	-----	0.0204	-----	-----	-----
119	0.0175	0.0451	0.0311	-----	0.0218	2793.	0.0055
---	-----	-----	-----	-----	-----	-----	-----
110	0.0151	0.0459	-----	0.0034	0.0213	2511.	0.0053
022	0.0063	0.0084	0.0054	0.0033	0.0036	454.0	0.0009
017	0.0026	0.0074	-----	-----	-----	449.0	0.0009
016	0.0026	0.0067	0.0053	0.0026	0.0034	295.0	0.0008
014	0.0021	0.0056	-----	-----	-----	221.0	0.0007
017	0.0027	0.0061	-----	-----	-----	395.0	0.0007
018	0.0026	0.0071	0.0051	0.0024	0.0027	462.0	0.0008
---	-----	-----	-----	-----	-----	-----	-----
019	0.0024	0.0074	0.0047	0.0009	0.0025	348.0	0.0007
007	0.0010	0.0030	0.0019	0.0007	0.0010	829.0	0.0003
006	0.0009	0.0025	-----	-----	-----	136.0	0.0003
006	0.0009	0.0026	-----	-----	-----	-----	0.0003
---	-----	-----	0.0018	0.0005	0.0008	-----	-----
006	0.0009	0.0022	-----	-----	-----	299.0	0.0002
006	0.0009	0.0023	-----	-----	-----	333.0	0.0002
---	-----	-----	0.0017	0.0004	0.0005	-----	-----
005	0.0007	0.0021	-----	-----	-----	416.0	0.0002
---	-----	-----	-----	-----	-----	-----	-----
006	0.0008	0.0022	0.0015	-----	0.0004	193.0	0.0001
002	0.0003	0.0012	0.0008	-----	-----	302.0	0.0001
002	0.0003	0.0008	-----	-----	-----	153.0	0.0001
002	0.0003	0.0007	-----	-----	-----	120.0	0.0001
001	0.0003	0.0005	0.0011	-----	-----	-----	-----
---	0.0001	0.0005	-----	-----	-----	-----	-----
001	0.0002	0.0004	-----	-----	-----	-----	0.0000
001	0.0002	0.0004	0.0004	0.0000	-----	-----	-----

2

AFF- 25
JP-4 (PETROLEUM); 4 DAY
1980 AUG 12-15

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	CO PPM BK6800-2	PAN PPM ECD-1	HCHO PPM CA	PART.024 PART/CC TSI-023	PART.042 PART/CC TSI-023	PART.075 PART/CC TSI-023	PART PART TSI-
1 623	-127	-----	0.000	-----	-----	-----	-----	---
1 630	-120	2.29	-----	-----	-----	-----	-----	---
1 756	-34	-----	0.000	-----	-----	-----	-----	---
1 800	-30	2.34	-----	-----	-----	-----	-----	---
1 805	-25	-----	-----	0.013	-----	-----	-----	---
1 904	34	-----	0.000	-----	-----	-----	-----	---
1 905	35	2.35	-----	-----	-----	-----	-----	---
1 1004	94	-----	0.000	-----	-----	-----	-----	---
1 1005	95	2.31	-----	-----	3841.	1.2E 04	4.0E 04	865
1 1104	154	-----	0.005	-----	-----	-----	-----	---
1 1105	155	2.32	-----	-----	501.	1479.	2.9E 04	2.4
1 1205	215	2.34	-----	-----	3841.	-2349.	6971.	2.9
1 1207	217	-----	0.011	-----	-----	-----	-----	---
1 1233	243	-----	-----	0.063	-----	-----	-----	---
1 1305	275	2.43	0.016	-----	2839.	435.	2531.	1.8
1 1404	334	-----	0.019	-----	-----	-----	-----	---
1 1405	335	2.48	-----	-----	-1002.	2523.	444.	1.1
1 1505	395	2.48	0.016	-----	0.	174.	799.	773
1 1605	455	2.44	-----	0.134	-167.	1044.	799.	498
2 725	1375	-----	0.000	-----	-----	-----	-----	---
2 730	1380	2.29	-----	0.163	0.	0.	89.	-2
2 930	1500	-----	0.000	0.027	-----	-----	-----	---
2 935	1505	0.83	-----	-----	1002.	348.	400.	14
2 1005	1535	0.74	-----	-----	1002.	174.	444.	24
2 1006	1536	-----	0.000	-----	-----	-----	-----	---
2 1105	1595	0.86	-----	-----	2338.	1218.	2531.	79
2 1106	1596	-----	0.000	-----	-----	-----	-----	---
2 1205	1655	0.91	-----	-----	1336.	348.	2886.	221
2 1206	1656	-----	0.000	-----	-----	-----	-----	---
2 1250	1700	-----	-----	0.148	-----	-----	-----	---
2 1305	1715	0.85	0.000	-----	1169.	87.	1199.	253
2 1405	1775	0.91	0.000	0.054	-334.	-174.	311.	190
2 1505	1835	0.85	0.000	-----	1670.	174.	266.	135
2 1605	1895	0.88	-----	-----	0.	87.	1465.	50
3 722	2812	-----	0.000	-----	-----	-----	-----	---
3 725	2815	0.97	-----	-----	1002.	696.	178.	7
3 734	2824	-----	-----	0.027	-----	-----	-----	---
3 915	2925	0.77	-----	-----	0.	-87.	44.	-2
3 917	2927	-----	-----	0.004	-----	-----	-----	---
3 1005	2975	0.75	0.000	-----	-167.	87.	-44.	7
3 1104	3034	-----	0.000	-----	-----	-----	-----	---
3 1105	3035	0.78	-----	-----	0.	-87.	-44.	4
3 1205	3095	0.79	0.000	-----	167.	261.	133.	-2
3 1305	3155	0.79	0.000	-----	=13493	7.0E 04	44.	2
3 1404	3214	-----	0.000	-----	-----	-----	-----	---
3 1405	3215	0.72	-----	-----	-167.	0.	89.	7
3 1505	3275	0.82	-----	-----	167.	87.	44.	9
3 1605	3335	0.81	0.000	-----	501.	87.	178.	2
4 720	4250	-----	0.003	-----	-----	-----	-----	---

----- NO DATA TAKEN

3

AFF- 25

JP-4 (PETROLEUM); 4 DAY
1980 AUG 12-15

CLOCK	ELAPSED	CO	PAN	HCHO	PART.024	PART.042	PART.075	PAR
TIME DY HR.	TIME (MIN)	PPM BK6800-2	PPM ECD-1	PPM CA	PART/CC TSI-023	PART/CC TSI-023	PART/CC TSI-023	PAR TSI
4 725	4255	0.82	-----	-----	167.	0.	89.	--
4 901	4351	-----	0.001	-----	-----	-----	-----	--
4 905	4355	0.57	-----	-----	167.	0.	0.	--
4 1004	4414	-----	0.002	-----	-----	-----	-----	--
4 1005	4415	0.62	-----	-----	1837.	1131.	222.	5
4 1105	4475	0.63	-----	-----	501.	-174.	1998.	11
4 1106	4476	-----	0.002	-----	-----	-----	-----	--
4 1205	4535	0.64	-----	-----	167.	87.	2087.	11
4 1206	4536	-----	0.001	-----	-----	-----	-----	--
4 1305	4595	0.66	-----	-----	835.	261.	178.	15
4 1307	4597	-----	0.001	-----	-----	-----	-----	--
4 1405	4655	0.66	-----	-----	167.	87.	266.	12
4 1407	4657	-----	0.001	-----	-----	-----	-----	--
4 1505	4715	0.71	-----	-----	501.	87.	266.	10
4 1506	4716	-----	0.002	-----	-----	-----	-----	--
4 1605	4775	0.76	-----	-----	167.	87.	222.	8

----- NO DATA TAKEN

NOTES

A P-XYL AND M-XYL WERE UNSEPARATED.

PART.042	PART.075	PART.133	PART.237	PART.422	PART.750
PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
0.	89.	24.	12.	7.	-4.
-----	-----	-----	-----	-----	-----
0.	0.	0.	12.	-13.	4.
-----	-----	-----	-----	-----	-----
1131.	222.	530.	123.	27.	-4.
-174.	1998.	1181.	98.	7.	4.
-----	-----	-----	-----	-----	-----
87.	2087.	1109.	197.	20.	0.
-----	-----	-----	-----	-----	-----
261.	178.	1566.	234.	47.	-4.
-----	-----	-----	-----	-----	-----
87.	266.	1277.	283.	13.	14.
-----	-----	-----	-----	-----	-----
87.	266.	1084.	234.	13.	7.
-----	-----	-----	-----	-----	-----
87.	222.	819.	221.	7.	11.

AFF- 26
JP-4 (SHALE): DYNAMIC
1980 AUG 20

DAY 1 (AUGUST 20)

0625: BAG FILLED WITH PURE AIR.
WET BULB TEMP: 8.5C; DRY BULB TEMP: 17.7C; R.H.= 28%
0701: 3.5 ML NO2 INJECTED
0703: 10.5 ML NO INJECTED
0707: 42 ML FREON INJECTED
0710-0725: 518 MICROLITERS JP-4 (SHALE) INJECTED
0830: UNCOVER BAG (T=0)
0930-1330: 5 SUCCESSIVE DILUTIONS WITH PURE AIR MADE.
OVERALL DILUTION FACTOR= 0.51
1325: TEFLON COVER PUT OVER TOP OF BAG FRAME FOR WIND PROTECTION
1401: POWER FAILURE
1407: POWER BACK ON
1430-1530: 2 PURE AIR DILUTIONS MADE

DAY 2 (AUGUST 21)

0710: BAG IS FLAT. RUN ABORTED.

T=0 AT 830 PST

BAG NO. 16 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	29.8	7.6	DEG C
UV RAD	EPPLEY-1	3.04	0.76	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	BENDIX	0.288	PPM
NO2-UNC	BENDIX	0.105	PPM
THC	BK6800-2	21.30	PPMC

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
1700	BENDIX	AF-LAB BENDIX NO-NOX NYLON FILT ANALYZER
1600	BK6800-2	BECKMAN CO,HC ANALYZER SN:100016
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
2000	ECD-1	RM-121; 12' 5% CARBOWAX-400 GC; ECD
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4130	EPPLEY-1	ARB TRAILER; EPPLEY 11692 UV RADIOMETER
2750	SE-52C-2	RM-121; 30M SE-52 QUARTZ CAP. GC; FID

JB-4 (SHALE): DYNAMIC
1980 AUG 20

CLOCK DY	TIME HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM BENDIX	NO2-UNC PPM BENDIX	NOX-UNC PPM BENDIX	THC PPMC BK6800-2	T DEG C DORIC-1	U MI EPI
1	620	-130	-----	-----	-----	-----	-----	-----	---
1	635	-115	0.000	0.000	0.000	0.000	17.10	17.6	---
1	745	-45	0.001	0.288	0.105	0.396	21.30	18.9	---
1	747	-43	-----	-----	-----	-----	-----	-----	---
1	905	35	0.006	0.256	0.129	0.392	21.10	23.5	---
1	909	39	-----	-----	-----	-----	-----	-----	---
1	1005	95	0.009	0.172	0.154	0.338	20.90	27.0	---
1	1010	100	-----	-----	-----	-----	-----	-----	---
1	1105	155	0.021	0.092	0.192	0.288	20.20	31.0	---
1	1205	215	0.075	0.031	0.228	0.250	19.60	35.5	---
1	1305	275	0.177	0.010	0.193	0.195	19.80	36.5	---
1	1411	341	-----	-----	-----	-----	-----	-----	---
1	1415	345	0.334	0.011	0.150	0.155	19.50	37.5	---
1	1505	395	0.400	0.003	0.113	0.113	19.10	37.0	---
1	1512	402	-----	-----	-----	-----	-----	-----	---
1	1605	455	0.411	0.003	0.082	0.082	19.00	33.9	---
1	1607	457	-----	-----	-----	-----	-----	-----	---

CLOCK DY	TIME HR.	ELAPSED TIME (MIN)	#PART>1 PART/CC CLIMET	BSCAT 10-4 M-1 MRI-388	AER.V UM3/CC TSI-023	AER.N PART/CC TSI-023	AER.S UM2/CC TSI-023	N-C4 PPM DMS-1	I F DM
1	620	-130	-----	-----	-----	-----	-----	0.0019	0.
1	635	-115	0.	0.3	1.	911.	16.	-----	---
1	740	-50	-----	-----	-----	-----	-----	-----	---
1	745	-45	0.	0.4	0.	190.	5.	-----	---
1	747	-43	-----	-----	-----	-----	-----	0.0536	0.
1	905	35	0.	0.6	1.	-280.	12.	-----	---
1	909	39	-----	-----	-----	-----	-----	-----	---
1	1005	95	0.	0.5	1.	-49.	8.	-----	---
1	1010	100	-----	-----	-----	-----	-----	-----	---
1	1105	155	0.	0.7	1.	549.	20.	-----	---
1	1205	215	0.	0.7	-0.	190.	8.	0.0396	0.
1	1305	275	0.	0.7	0.	401.	16.	-----	---
1	1411	341	-----	-----	-----	-----	-----	-----	---
1	1415	345	0.	1.2	7.	1246.	121.	-----	---
1	1505	395	0.	2.6	14.	1687.	216.	-----	---
1	1512	402	-----	-----	-----	-----	-----	0.0281	0.
1	1605	455	1.	3.3	14.	1614.	198.	-----	---

----- NO DATA TAKEN

THC PPMC BK6800-2	T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-1	FREON 12 RAW DATA DMS-1	CONDENS 10E3/CC CNC-143	#PART>.3 PART/CC CLIMET	#PART>.5 PART/CC CLIMET
-----	-----	-----	0.0000	-----	-----	-----
17.10	17.6	-----	-----	0.5	1.	0.
21.30	18.9	-----	-----	0.5	1.	0.
-----	-----	-----	78.08	-----	-----	-----
21.10	23.5	2.41	-----	0.4	2.	0.
-----	-----	-----	80.64	-----	-----	-----
20.90	27.0	3.40	-----	0.3	2.	0.
-----	-----	-----	121.7	-----	-----	-----
20.20	31.0	4.08	60.03	0.3	3.	0.
19.60	35.5	3.67	60.42	0.2	2.	0.
19.80	36.5	3.12	51.07	0.3	8.	0.
-----	-----	-----	50.05	-----	-----	-----
19.50	37.5	3.47	-----	0.9	54.	5.
19.10	37.0	2.12	-----	0.9	192.	31.
-----	-----	-----	42.37	-----	-----	-----
19.00	33.9	2.05	-----	0.9	247.	58.
-----	-----	-----	39.68	-----	-----	-----

AER.S UM2/CC TSI-023	N-C4 PPM DMS-1	I-C5 PPM DMS-1	N-C5 PPM DMS-1	N-C6 PPM SE-52C-2	N-C6 PPM DMS-1	N-C7 PPM SE-52C-2
-----	0.0019	0.0004	0.0002	-----	0.0000	-----
16.	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	0.0168	-----	0.0101
5.	-----	-----	-----	-----	-----	-----
-----	0.0536	0.0342	0.0428	-----	0.0481	-----
12.	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	0.0153	-----	0.0093
8.	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	0.0135	-----	0.0083
20.	-----	-----	-----	0.0114	-----	0.0070
8.	0.0396	0.0255	0.0324	0.0105	0.0364	0.0065
16.	-----	-----	-----	0.0094	-----	0.0057
-----	-----	-----	-----	0.0094	-----	0.0056
121.	-----	-----	-----	-----	-----	-----
216.	-----	-----	-----	-----	-----	-----
-----	0.0281	0.0311	0.0443	0.0079	0.0690	0.0048
198.	-----	-----	-----	-----	-----	-----

AFF- 26
 JP-4 (SHALE): DYNAMIC
 1980 AUG 20

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	N-C8 PPM SE-52C-2	N-C9 PPM SE-52C-2	C10 PPM SE-52C-2	C11 PPM SE-52C-2	BENZENE PPM 10'C-600	TOLUENE PPM SE-52C-2	TOL P 10'
1 620	-130	-----	-----	-----	0.0012	0.0003	-----	0.
1 635	-115	-----	-----	-----	-----	-----	-----	--
1 740	-50	0.0887	0.0160	0.0332	0.0535	-----	0.0162	--
1 745	-45	-----	-----	-----	-----	-----	-----	--
1 747	-43	-----	-----	-----	-----	0.0082	-----	0.
1 905	35	-----	-----	-----	-----	-----	-----	--
1 909	39	0.0829	0.0153	0.0334	0.0557	-----	0.0355	--
1 1005	95	-----	-----	-----	-----	-----	-----	--
1 1010	100	0.0743	0.0137	0.0302	0.0507	-----	0.0318	--
1 1100	150	-----	-----	-----	-----	-----	-----	--
1 1105	155	0.0634	0.0118	0.0263	0.0447	-----	0.0271	--
1 1116	166	-----	-----	-----	-----	-----	-----	--
1 1132	182	-----	-----	-----	-----	-----	-----	--
1 1205	215	0.0582	0.0108	0.0233	0.0394	0.0065	0.0250	0.
1 1305	275	0.0510	0.0094	0.0210	0.0354	-----	0.0219	--
1 1411	341	0.0495	0.0089	0.0194	0.0318	-----	0.0214	--
1 1415	345	-----	-----	-----	-----	-----	-----	--
1 1505	395	-----	-----	-----	-----	-----	-----	--
1 1512	402	0.0414	0.0076	0.0166	0.0276	0.0053	0.0182	0.
1 1605	455	-----	-----	-----	-----	-----	-----	--
2 1224	1674	-----	-----	-----	-----	-----	-----	--
2 1242	1672	-----	-----	-----	-----	-----	-----	--
2 1355	1765	-----	-----	-----	-----	-----	-----	--
2 1450	1820	-----	-----	-----	-----	-----	-----	--
2 1507	1837	-----	-----	-----	-----	-----	-----	--

----- NO DATA TAKEN

BENZENE PPM 10'C-600	TOLUENE PPM SE-52C-2	TOLUENE PPM 10'C-600	124TMEBZ RAW DATA SE-52C-2	M+P-XYL PPM SE-52C-2	CO PPM BK6800-2	PAN PPM ECD-1
0.0003	-----	0.0001	-----	-----	-----	0.0000
-----	0.0162	-----	4594.	0.0088	0.91	0.0000
0.0082	-----	0.0311	-----	-----	0.98	-----
-----	0.0355	-----	5058.	0.0083	0.99	-----
-----	0.0318	-----	4637.	0.0074	0.84	-----
-----	0.0271	-----	4100.	0.0063	0.86	0.0001
-----	-----	-----	-----	-----	-----	0.0001
0.0065	0.0250	0.0232	3183.	0.0057	1.35	0.0001
-----	0.0219	-----	3112.	0.0049	1.00	-----
-----	0.0214	-----	2576.	0.0045	-----	-----
-----	-----	-----	-----	-----	0.73	-----
0.0053	0.0182	0.0171	2221.	0.0038	0.84	-----
-----	-----	-----	-----	-----	0.82	-----
-----	-----	-----	-----	-----	-----	0.0001
-----	-----	-----	-----	-----	-----	0.0001
-----	-----	-----	-----	-----	-----	0.0001
-----	-----	-----	-----	-----	-----	0.0000
-----	-----	-----	-----	-----	-----	0.0000

AFF- 26

JP-4 (SHALE): DYNAMIC
1980 AUG 20

CLOCK	ELAPSED	HCHO	PART.024	PART.042	PART.075	PART.133	PART.237	PART.422	PART.750
TIME	TIME	PPM	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
DY HR.	(MIN)	CA	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
1 635	-115	-----	668.	-87.	266.	48.	12.	0.	4.
1 745	-45	-----	0.	0.	178.	0.	12.	0.	0.
1 752	-38	0.023	-----	-----	-----	-----	-----	-----	-----
1 905	35	-----	-334.	-87.	89.	24.	25.	0.	4.
1 1005	95	-----	0.	0.	-89.	24.	12.	0.	4.
1 1105	155	-----	167.	174.	89.	96.	12.	7.	4.
1 1200	210	0.019	-----	-----	-----	-----	-----	-----	-----
1 1205	215	-----	0.	87.	44.	24.	25.	13.	-4.
1 1305	275	-----	167.	0.	89.	96.	49.	0.	0.
1 1415	345	-----	167.	87.	266.	434.	221.	60.	11.
1 1505	395	-----	167.	435.	178.	313.	443.	127.	25.
1 1552	442	0.042	-----	-----	-----	-----	-----	-----	-----
1 1605	455	-----	501.	87.	311.	193.	381.	113.	28.

----- NO DATA TAKEN

AFF- 27
NOX- AIR IRRADIATION
1980 AUG 21

1222: BAG FILLED WITH PURE AIR.
1231: 0.8 ML PROPANE INJECTED
1233: 0.8 ML PROPENE INJECTED
1235: 5 ML NO2 ADDED
1237: 17 ML NO ADDED
1300: BAG UNCOVERED
NO OZONE FORMATION OCCURRED.
BAG FILLED WITH APPROXIMATELY 30 % R. H. PURE AIR.

RESULTS:

CALC. AVG. OH= $30.8 * D \ln(\text{PROPANE}/\text{PROPENE})/DT = \sim .03(+-.01)$ PPT
CALC. RAD. INPUT= $16.0 * (\text{AVG. OH}) * (60 + \text{MIN. AVG. NO}_2) = .04$ PPB/MIN
-D (NO)/DT= 0.10 PPB/MIN

T=0 AT 1300 PST

BAG NO. 17 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
HYDROXYL		0.039	0.044	PPT
TS	DORIC-1	35.8	0.6	DEG C
K1		0.322	0.086	MIN-1

ID	INST.	INITIAL CONC.	UNITS
NO	BENDIX	0.283	PPM
NO2-UNC	BENDIX	0.092	PPM
PROPANE	DMS-1	0.0327	PPM
PROPENE	DMS-1	0.0331	PPM

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600; FID
2100	PN-1	RM 121; POROPAK N ; FID
1790	D-1790	DASIBI 1790 OZONE MONITOR
1700	BENDIX	AF-LAB BENDIX NO-NOX NYLON FILT ANALYZER
1600	BK6800-2	BECKMAN HYDROCARBON GC MD:6800 SN:100016
1800	DORIC-1	DORIC TEMP INDICATOR, SN 51479
4130	EPPLEY	ARB LAB; EPPLEY 11692 UV RADIOMETER
2200	DMS-1	RM-121; DIMETHYLSULFOLANE; FID

AFF- 27

NOX- AIR IRRADIATION
1980 AUG 21

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	NO PPM BENDIX	NO2-UNC PPM BENDIX	NOX-UNC PPM BENDIX	PROPANE PPM DMS-1	PROPENE PPM DMS-1	LNC3/C3=	HYD P
1 1252	-8	-----	-----	-----	0.0327	0.0331	-0.0103	--
1 1255	-5	0.283	0.092	0.380	-----	-----	-----	--
1 1310	10	0.282	0.093	0.380	-----	-----	-----	--
1 1315	15	-----	-----	-----	0.0334	0.0335	-0.0024	0
1 1320	20	0.282	0.091	0.378	-----	-----	-----	--
1 1330	30	0.280	0.091	0.377	0.0324	0.0311	0.0399	-0
1 1340	40	0.279	0.092	0.372	-----	-----	-----	--
1 1345	45	-----	-----	-----	0.0312	0.0300	0.0365	0
1 1350	50	0.279	0.092	0.376	-----	-----	-----	--
1 1400	60	0.279	0.092	0.372	0.0333	0.0304	0.0890	0
1 1410	70	0.277	0.092	0.370	-----	-----	-----	--
1 1415	75	-----	-----	-----	0.0338	0.0306	0.1000	0
1 1420	80	0.278	0.093	0.372	-----	-----	-----	--
1 1430	90	0.276	0.093	0.372	0.0333	0.0294	0.1247	0
1 1440	100	0.272	0.094	0.371	-----	-----	-----	--
1 1445	105	-----	-----	-----	0.0327	0.0288	0.1279	0
1 1450	110	0.271	0.095	0.370	-----	-----	-----	--
1 1500	120	0.272	0.097	0.371	0.0336	0.0295	0.1301	--

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	CO PPM BK6800-2
1 1255	-5	2.06
1 1310	10	2.16
1 1320	20	2.20
1 1330	30	2.24
1 1340	40	2.35
1 1350	50	2.39
1 1400	60	2.41
1 1410	70	2.48
1 1420	80	2.44
1 1430	90	2.56
1 1440	100	2.56
1 1450	110	2.60
1 1500	120	2.68

----- NO DATA TAKEN

NOTES

A K1 CALCULATED FROM UV RADIOMETER DATA

PROPENE PPM DMS-1	LNC3/C3=	HYDROXYL PPT	TS DEG C DORIC-1	N1 MIN-1	THC PPMC BK6800-2	UV RAD MW/CM2 EPFLEY
0.0331	-0.0103	-----	-----	-----	-----	-----
-----	-----	-----	36.0	0.400 A	2.04	3.65
-----	-----	-----	36.0	0.394	1.94	3.55
0.0335	-0.0024	0.087	-----	-----	-----	-----
-----	-----	-----	36.1	0.324	1.98	2.89
0.0311	0.0399	-0.007	36.4	0.343	1.99	3.02
-----	-----	-----	36.5	0.459	1.96	3.99
0.0300	0.0365	0.108	-----	-----	-----	-----
-----	-----	-----	36.0	0.255	1.92	2.18
0.0304	0.0890	0.023	36.5	0.435	1.82	3.66
-----	-----	-----	36.0	0.257	2.11	2.12
0.0306	0.1000	0.051	-----	-----	-----	-----
-----	-----	-----	35.8	0.211	1.87	1.71
0.0294	0.1247	0.006	35.5	0.335	1.96	2.64
-----	-----	-----	35.2	0.195	1.94	1.49
0.0288	0.1279	0.005	-----	-----	-----	-----
-----	-----	-----	34.8	0.337	2.01	2.51
0.0295	0.1301	-----	35.0	0.238	1.97	1.72

AFF- 28
PROPENE CONDITIONING
1980 AUG 22

0720: BAG FILLED WITH PURE AIR.
0732: 13.5 ML NO2 INJECTED
0734: 14.5 ML NO INJECTED
0736: 28.5 ML PROPENE ADDED
0804: BAG UNCOVERED

T=0 AT 804 PST

BAG NO. 17 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	28.4	5.9	DEG C

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIB1 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038-2
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	T DEG C DORIC-1
1 755	-9	0.000	0.237 A	0.226 A	0.476 A	19.5
1 904	60	0.007	0.177	0.272	0.465	23.8
1 1004	120	0.033	0.077	0.358	0.432	28.0
1 1104	180	0.170	0.014	0.388	0.382	31.0
1 1204	240	0.428	0.007	0.331	0.320	33.5
1 1304	300	0.635	0.004	0.288	0.278	34.8

----- NO DATA TAKEN

NOTES

A NOX-BOX PROBABLY OUT OF CALIBRATION. HIGHER VALUES MORE QUESTIONABLE.

AFF- 29
OZONE CONDITIONING
1980 AUG 22-25

AUG. 22

1420-1550: BAG FILLED WITH PURE AIR.

1430: ~9.5 L OZONE INFECTED.

AUG. 25

0700: BAG ~40-50% FULL.

0720: BAG PURGED.

NOTE: BAG COVERED THROUGHOUT RUN.

RESULTS: OZONE DECAY RATES (%/HR)

1555(AUG.22)- 1604(AUG.24) 0.56

1604(AUG.24)- 0705(AUG.25) 0.43

T=0 AT 1000 PST

BAG NO. 17 USED

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790
1 1555	355	4.591
3 1604	3244	3.498
4 705	4145	3.277

----- NO DATA TAKEN

AFF- 30
PURE AIR PHOTOLYSIS
1980, AUGUST 25

1025: BAG FILLED WITH PURE AIR.

1030: BAG UNCOVERED

RESULTS: OZONE FORMATION RATE = 6.4 PPB/HR

T=0 AT 1030 PST

BAG NO. 17 USED

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790
1 1015	-15	0.004
1 1105	35	0.006
1 1200	90	0.012
1 1300	150	0.021
1 1400	210	0.029
1 1500	270	0.034
1 1530	300	0.036

----- NO DATA TAKEN

AFF- 31
JP-4 (SHALE): DYNAMIC
1980 AUG 26-27

DAY 1 (AUGUST 26)

0616: BAG FILLED WITH PURE AIR.
0640: WET BULB= 10.7 C, DRY BULB= 21.2, R.H.= 26%
0659: 3.5 ML NO2 INJECTED
0701: 11 ML NO INJECTED
0707-0708: 125 ML FREON ADDED
0712-0727: 518 MICROLITERS JP-4 (SHALE) ADDED
0830: BAG UNCOVERED
0835: TEFLON COVER OVER BAG TO PREVENT WIND DISTURBANCE
0930-1130: 3 SUCCESSIVE PURE AIR DILUTIONS
1206-1212: POWER FAILURE
1243-1530: 4 MORE PURE AIR DILUTIONS MADE
TOTAL DILUTION FACTOR FOR DAY 1= 0.424

DAY 2 (AUGUST 27)

0700: WATER CONDENSING ON TEFLON BAG COVER
0738-1330: 7 SUCCESSIVE PURE AIR DILUTIONS
TOTAL DILUTION FACTOR= 0.448
1206-1212: POWER FAILURE

RESULTS:	DAY 1	DAY 2
-----	-----	-----
AVG.T (DEG.C)	38(+4)	35(+7)
AVG.UV (MW/CM2)	2.9(+0.8)	3.2(+0.9)

T=0 AT 830 PST

BAG NO. 17 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	35.1	7.4	DEG C
UV RAD	EPPLEY-2	3.04	0.80	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.317	PPM
NO2-UNC	B-NOX-1	0.123	PPM
THC	BK6800-2	24.30	PPMC

AFF- 31
JP-4 (SHALE): DYNAMIC
1980 AUG 26-27

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
2750	SE-52C-2	RM-121; 30M SE-52 QUARTZ CAP. GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
1600	BK6800-2	BECKMAN CO,HC ANALYZER SN:100016
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2000	ECD-1	RM-121; 12" 5% CARBOWAX-400 GC; ECD
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148

AFF- 31
JP-4 (SHALE): DYNAMIC
1980 AUG 26-27

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	THC PPMC BK6800-2	T DEG C DORIC-1	UV MW/ EPPL
1 620	-130	-----	-----	-----	-----	-----	-----	---
1 625	-125	0.000	0.000	0.000	0.000	1.17	19.3	---
1 740	-50	-----	-----	-----	-----	-----	-----	---
1 745	-45	0.000	0.317	0.123	0.451	24.30	24.1	---
1 905	35	0.005	0.270	0.150	0.439	23.90	31.5	2.
1 1005	95	0.012	0.173	0.192	0.383	21.90	35.0	2.
1 1105	155	0.029	0.073	0.238	0.316	19.30	39.0	3.
1 1220	230	-----	-----	-----	-----	-----	-----	---
1 1230	240	0.158	0.011	0.229	0.236	16.60	43.0	3.
1 1305	275	0.241	0.008	0.182	0.188	14.30	42.6	3.
1 1310	280	-----	-----	-----	-----	-----	-----	---
1 1405	335	0.368	0.005	0.132	0.136	12.30	41.5	3.
1 1505	395	0.408	0.002	0.090	0.092	10.50	39.5	2.
1 1509	399	-----	-----	-----	-----	-----	-----	---
1 1605	455	0.383	0.002	0.067	0.068	9.06	36.5	1.
2 711	1361	-----	-----	-----	-----	-----	-----	---
2 715	1365	0.301	0.009	0.019	0.026	8.71	23.5	1.
2 805	1415	0.265	0.007	0.019	0.024	8.18	25.2	2.
2 807	1417	-----	-----	-----	-----	-----	-----	---
2 905	1475	0.232	0.003	0.021	0.026	7.39	30.4	2.
2 906	1476	-----	-----	-----	-----	-----	-----	---
2 1005	1535	0.205	0.002	0.020	0.022	6.37	34.0	3.
2 1105	1595	0.188	0.001	0.018	0.020	5.79	38.2	3.
2 1205	1655	0.175	0.003	0.013	0.019	5.26	40.2	3.
2 1206	1656	-----	-----	-----	-----	-----	-----	---
2 1305	1715	0.166	0.004	0.013	0.018	4.88	42.9	4.
2 1400	1770	-----	-----	-----	-----	-----	-----	---
2 1405	1775	0.152	0.005	0.012	0.019	4.36	40.5	---
2 1435	1805	0.152	0.008	0.017	0.021	4.37	39.5	---

----- NO DATA TAKEN

THC PPMC BK6800-2	T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-2	FREON 12 RAW DATA DMS-1	CONDENS 10E3/CC CNC-143	#PART<.3 PART/CC CLIMET	#PART>.5 PART/CC CLIMET
-----	-----	-----	-----	-----	-----	-----
1.17	19.3	-----	-----	0.1	2.	0.
-----	-----	-----	187.9 A	-----	-----	-----
24.30	24.1	-----	-----	0.2	2.	0.
23.90	31.5	2.16	4.032	0.4	1.	0.
21.90	35.0	2.68	3.768	0.3	1.	0.
19.30	39.0	3.71	3.304	0.3	0.	0.
-----	-----	-----	2.928	-----	-----	-----
16.60	43.0	3.51	-----	0.7	22.	1.
14.30	42.6	3.95	-----	0.8	76.	5.
-----	-----	-----	2.656	-----	-----	-----
12.30	41.5	3.05	2.448	0.8	246.	54.
10.50	39.5	2.28	-----	0.6	274.	85.
-----	-----	-----	2.216	-----	-----	-----
9.06	36.5	1.99	1.708	0.6	220.	105.
-----	-----	-----	1.964	-----	-----	-----
8.71	23.5	1.67	-----	0.0	5.	3.
8.18	25.2	2.44	-----	0.3	4.	2.
-----	-----	-----	1.756	-----	-----	-----
7.39	30.4	2.77	-----	0.5	4.	1.
-----	-----	-----	1.592	-----	-----	-----
6.37	34.0	3.71	1.396	0.5	3.	1.
5.79	38.2	3.76	1.236	0.6	3.	1.
5.26	40.2	3.90	-----	0.5	6.	0.
-----	-----	-----	1.088	-----	-----	-----
4.88	42.9	4.01	1.008	0.5	12.	0.
-----	-----	-----	0.8800	-----	-----	-----
4.36	40.5	-----	-----	0.5	23.	1.
4.37	39.5	-----	-----	0.5	28.	1.

2

AFF- 31
JP-4 (SHALE): DYNAMIC
1980 AUG 26-27

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	#PART>1 PART/CC CLINET	BSCAT 10-4 M-1 MRI-388	AER.V UM3/CC TSI-023	AER.N PART/CC TSI-023	AER.S UM2/CC TSI-023	N-C4 PPM DMS-1	CS-1 PP SE-5
1 620	-130	-----	-----	-----	-----	-----	0.0029	---
1 625	-125	0.	0.4	0.	176.	2.	-----	---
1 740	-50	-----	-----	-----	-----	-----	0.0195	---
1 742	-48	-----	-----	-----	-----	-----	-----	0.0
1 745	-45	0.	0.7	1.	637.	20.	-----	---
1 905	35	0.	0.4	0.	161.	4.	-----	0.0
1 1005	95	0.	0.4	2.	374.	16.	-----	0.0
1 1105	155	0.	0.4	0.	407.	8.	-----	0.0
1 1220	230	-----	-----	-----	-----	-----	-----	0.0
1 1230	240	0.	0.8	2.	562.	40.	-----	---
1 1305	275	0.	1.3	7.	985.	120.	-----	---
1 1310	280	-----	-----	-----	-----	-----	-----	0.0
1 1405	335	1.	3.2	11.	765.	154.	-----	0.0
1 1505	395	2.	3.4	9.	274.	110.	-----	---
1 1509	399	-----	-----	-----	-----	-----	-----	0.0
1 1605	455	3.	2.7	7.	784.	88.	-----	---
2 711	1361	-----	-----	-----	-----	-----	-----	0.0
2 715	1365	0.	0.6	2.	-113.	17.	-----	---
2 805	1415	0.	0.6	0.	-302.	5.	-----	---
2 807	1417	-----	-----	-----	-----	-----	-----	0.0
2 905	1475	0.	0.7	1.	867.	24.	-----	---
2 906	1476	-----	-----	-----	-----	-----	-----	0.0
2 1005	1535	0.	0.6	1.	573.	26.	-----	0.0
2 1105	1595	0.	0.8	3.	919.	57.	-----	0.0
2 1205	1655	0.	0.8	3.	650.	61.	-----	---
2 1206	1656	-----	-----	-----	-----	-----	-----	0.0
2 1305	1715	0.	0.8	4.	1235.	58.	-----	0.0
2 1405	1775	0.	1.1	2.	29.	44.	-----	---
2 1406	1776	-----	-----	-----	-----	-----	-----	0.0
2 1435	1805	0.	1.1	3.	699.	56.	-----	---

----- NO DATA TAKEN

AER.S UM2/CC TSI-023	N-C4 PPM DMS-1	C5-ISOMS PPM SE-52C-2	I-C5 PPM DMS-1	N-C5 PPM DMS-1	N-C6 PPM SE-52C-2	N-C6 PPM DMS-1
-----	0.0029	-----	0.0004	0.0000	-----	-----
2.	-----	-----	-----	-----	-----	-----
-----	0.0195	-----	0.0143	0.0190	-----	0.0283
-----	-----	0.0034	-----	-----	0.0097	-----
20.	-----	-----	-----	-----	-----	-----
4.	-----	0.0033	-----	-----	0.0092	-----
16.	-----	0.0027	-----	-----	0.0076	-----
8.	-----	0.0025	-----	-----	0.0070	-----
-----	-----	0.0025	-----	-----	0.0068	-----
40.	-----	-----	-----	-----	-----	-----
120.	-----	-----	-----	-----	-----	-----
-----	-----	0.0016	-----	-----	0.0046	-----
154.	-----	0.0015	-----	-----	0.0042	-----
110.	-----	-----	-----	-----	-----	-----
-----	-----	0.0016	-----	-----	0.0040	-----
88.	-----	-----	-----	-----	-----	-----
-----	-----	0.0014	-----	-----	0.0037	-----
17.	-----	-----	-----	-----	-----	-----
5.	-----	-----	-----	-----	-----	-----
-----	-----	0.0012	-----	-----	0.0031	-----
24.	-----	-----	-----	-----	-----	-----
-----	-----	0.0012	-----	-----	0.0030	-----
26.	-----	0.0009	-----	-----	0.0024	-----
57.	-----	0.0008	-----	-----	-----	-----
61.	-----	-----	-----	-----	-----	-----
-----	-----	0.0008	-----	-----	0.0020	-----
58.	-----	0.0006	-----	-----	0.0016	-----
44.	-----	-----	-----	-----	-----	-----
-----	-----	0.0006	-----	-----	0.0015	-----
56.	-----	-----	-----	-----	-----	-----

AFF- 31
JP-4 (SHALE): DYNAMIC
1980 AUG 26-27

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	N-C7 PPM SE-52C-2	N-C8 PPM SE-52C-2	N-C9 PPM SE-52C-2	C10 PPM SE-52C-2	C11 PPM SE-52C-2	TOLUENE PPM SE-52C-2	TO 10
1 620	-130	-----	-----	-----	-----	-----	-----	0
1 625	-125	-----	-----	-----	-----	-----	-----	-
1 740	-50	-----	-----	-----	-----	-----	-----	0
1 742	-48	0.0071	0.0677	0.0126	0.0275	0.0447	0.0280	-
1 745	-45	-----	-----	-----	-----	-----	-----	-
1 905	35	0.0068	0.0662	0.0124	0.0265	0.0443	0.0271	-
1 1005	95	0.0057	0.0556	0.0106	0.0237	0.0398	0.0228	-
1 1105	155	0.0052	0.0507	0.0095	0.0214	0.0359	0.0207	-
1 1220	230	0.0049	0.0460	0.0085	0.0181	0.0299	0.0189	0
1 1230	240	-----	-----	-----	-----	-----	-----	-
1 1305	275	-----	-----	-----	-----	-----	-----	-
1 1310	280	0.0035	0.0341	0.0064	0.0050	0.0238	0.0142	-
1 1405	335	0.0032	0.0300	0.0057	0.0126	0.0219	0.0128	-
1 1505	395	-----	-----	-----	-----	-----	-----	-
1 1509	399	0.0030	0.0279	0.0053	0.0119	0.0200	0.0119	0
1 1605	455	-----	-----	-----	-----	-----	-----	-
2 700	1350	-----	-----	-----	-----	-----	-----	-
2 711	1361	0.0027	0.0240	0.0044	0.0093	0.0148	0.0104	0
2 715	1365	-----	-----	-----	-----	-----	-----	-
2 805	1415	-----	-----	-----	-----	-----	-----	-
2 807	1417	0.0023	0.0216	0.0040	0.0083	0.0131	0.0093	-
2 905	1475	-----	-----	-----	-----	-----	-----	-
2 906	1476	0.0022	0.0200	0.0026	0.0077	0.0122	0.0087	-
2 1005	1535	0.0018	0.0157	0.0028	0.0062	0.0084	0.0071	-
2 1105	1595	0.0016	0.0148	0.0027	0.0058	0.0093	0.0064	-
2 1205	1655	-----	-----	-----	-----	-----	-----	-
2 1206	1656	0.0015	0.0139	0.0024	0.0051	0.0082	0.0059	0.
2 1305	1715	0.0012	0.0106	0.0019	0.0040	0.0066	0.0046	-
2 1405	1775	-----	-----	-----	-----	-----	-----	-
2 1406	1776	0.0011	0.0101	0.0018	0.0038	0.0059	0.0043	0.
2 1435	1805	-----	-----	-----	-----	-----	-----	-

----- NO DATA TAKEN

C11 PPM SE-52C-2	TOLUENE PPM SE-52C-2	TOLUENE PPM 10'C-600	124TMEBZ RAW DATA SE-52C-2	M+P-XYL PPM SE-52C-2	CO PPM BK6800-2	PAN PPM ECI-1
-----	-----	0.0001	-----	-----	-----	0.0000
-----	-----	-----	-----	-----	2.06	-----
-----	-----	0.0219	-----	-----	-----	-----
0.0447	0.0280	-----	4028.	0.0069	-----	0.0000
-----	-----	-----	-----	-----	2.15	-----
0.0443	0.0271	-----	3607.	0.0067	2.17	-----
0.0398	0.0228	-----	3671.	0.0057	2.01	-----
0.0359	0.0207	-----	3411.	0.0051	2.01	-----
0.0299	0.0189	0.0147	2364.	0.0045	-----	0.0027
-----	-----	-----	-----	-----	1.87	-----
-----	-----	-----	-----	-----	1.76	-----
0.0238	0.0142	-----	1872.	0.0033	-----	-----
0.0219	0.0128	-----	1748.	0.0029	1.73	-----
-----	-----	-----	-----	-----	1.77	-----
0.0200	0.0119	0.0108	1534.	0.0026	-----	0.0112
-----	-----	-----	-----	-----	1.60	-----
-----	-----	-----	-----	-----	-----	0.0060
0.0148	0.0104	0.0100	943.0	0.0021	-----	-----
-----	-----	-----	-----	-----	1.74	-----
-----	-----	-----	-----	-----	1.65	-----
0.0131	0.0093	-----	820.0	0.0019	-----	-----
-----	-----	-----	-----	-----	1.79	-----
0.0122	0.0087	-----	787.0	0.0018	-----	-----
0.0084	0.0071	-----	359.0	0.0014	1.67	-----
0.0093	0.0064	-----	562.0	0.0012	1.78	-----
-----	-----	-----	-----	-----	1.62	-----
0.0082	0.0059	0.0047	439.0	0.0011	-----	0.0015
0.0066	0.0046	-----	361.0	0.0009	1.53	-----
-----	-----	-----	-----	-----	1.45	-----
0.0059	0.0043	0.0040	389.0	0.0008	-----	0.0009
-----	-----	-----	-----	-----	1.52	-----

AFF- 31
JP-4 (SHALE): DYNAMIC
1980 AUG 26-27

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	HCHO PPM CA	PART.024 PART/CC TSI-023	PART.042 PART/CC TSI-023	PART.075 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART.237 PART/CC TSI-023	PART.422 PART/CC TSI-023	PART.750 PART/CC TSI-023
1 625	-125	-----	0.	87.	89.	0.	0.	0.	0.
1 745	-45	-----	334.	87.	133.	48.	25.	7.	4.
1 810	-20	0.015	-----	-----	-----	-----	-----	-----	-----
1 905	35	-----	167.	-87.	44.	24.	12.	0.	0.
1 1005	95	-----	167.	87.	89.	24.	0.	0.	7.
1 1105	155	-----	334.	0.	0.	48.	25.	0.	0.
1 1200	210	0.023	-----	-----	-----	-----	-----	-----	-----
1 1230	240	-----	0.	-87.	444.	96.	98.	7.	4.
1 1305	275	-----	167.	87.	89.	289.	283.	60.	11.
1 1405	335	-----	167.	0.	89.	145.	234.	107.	25.
1 1505	395	-----	167.	-261.	89.	48.	123.	87.	21.
1 1600	450	0.029	-----	-----	-----	-----	-----	-----	-----
1 1605	455	-----	167.	174.	178.	96.	98.	53.	18.
2 715	1365	-----	0.	-261.	44.	96.	0.	0.	7.
2 721	1371	0.029	-----	-----	-----	-----	-----	-----	-----
2 805	1415	-----	-334.	-87.	44.	72.	12.	-13.	4.
2 905	1475	-----	334.	174.	222.	96.	37.	0.	4.
2 1005	1535	-----	334.	-87.	89.	169.	61.	7.	0.
2 1105	1595	-----	0.	348.	133.	313.	111.	7.	7.
2 1205	1655	-----	167.	0.	89.	217.	148.	27.	4.
2 1216	1666	0.017	-----	-----	-----	-----	-----	-----	-----
2 1305	1715	-----	668.	0.	444.	-48.	148.	13.	11.
2 1405	1775	-----	334.	-609.	89.	72.	123.	13.	7.
2 1430	1800	0.013	-----	-----	-----	-----	-----	-----	-----
2 1435	1805	-----	334.	0.	89.	96.	160.	13.	7.

----- NO DATA TAKEN

NOTES

A ALL SUCCEEDING DATA WAS SWITCHED TO A LOOP.

AFF- 32
JP-4 (PETROLEUM); VARIABLE NOX
1980 AUG 28-29

DAY 1 (AUGUST 28)

0635: BAG FILLED WITH PURE AIR.
0650: WET BULB= 10 C, DRY BULB= 20.4 C, R.H.= 25%
0656: 740 MICROLITERS JP-4 (PETROLEUM) INJECTED
0716: 250 ML FREON 12 ADDED
0730: BAG DIVIDED
0802: 2.5 ML NO2 INJECTED INTO SIDE 1
0804: 7.5 ML NO2 INJECTED INTO SIDE 2
0836: 1.26 ML NO2 INJECTED INTO SIDE 2
0838: 3.76 ML NO INJECTED INTO SIDE 2
0905: BAG UNCOVERED
1305: BAG COVERED WITH TEFLON COVER
1630: BAG COVERED FOR NIGHT

DAY 2 (AUGUST 29)

0830: BAG UNCOVERED

RESULTS:	DAY 1	DAY 2
-----	-----	-----
AVG.T (DEG.C)	37(+3)	37(+4)
AVG.UV (MW/CM2)	2.4(+1.0)	3.2(+0.6)

T=0 AT 905 PST

BAG NO. 17 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	33.3	6.9	DEG C	SIDE 1
T	DORIC-1	34.6	6.5	DEG C	SIDE 2
UV RAD	EPPLEY-2	2.81	0.95	MW/CM2	

ID	INST.	INITIAL CONC.	UNITS	
NO	B-NOX-1	0.323	PPM	SIDE 1
NO	B-NOX-1	0.161	PPM	SIDE 2
NO2-UNC	B-NOX-1	0.188	PPM	SIDE 1
NO2-UNC	B-NOX-1	0.107	PPM	SIDE 2
THC	BK6800-2	29.30	PPMC	SIDE 1
THC	BK6800-2	29.00	PPMC	SIDE 2

AFF- 32

JP-4 (PETROLEUM); VARIABLE NOX
1980 AUG 28-29

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
1600	BK6800-2	BECKMAN CO,HC ANALYZER SN:100016
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
2000	ECD-1	RM-121; 12' 5% CARBOWAX-400 GC; ECD
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG
2750	SE-52C-2	RM-121; 30M SE-52 QUARTZ CAP. GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID

AFF- 32
JP-4 (PETROLEUM); VARIABLE NOX
1980 AUG 28-29

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 OZONE PPM D-1790	SIDE 2 OZONE PPM D-1790	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SI NOX P B-N
1 620	-165	0.000	0.000	0.002	0.002	0.004	0.004	0
1 815	-50	0.008	-----	0.323	-----	0.188	-----	0
1 855	-10	-----	0.010	-----	0.161	-----	0.107	--
1 1005	60	0.024	-----	0.139	-----	0.322	-----	0
1 1015	70	-----	0.088	-----	0.019	-----	0.214	---
1 1105	120	0.127	-----	0.021	-----	0.405	-----	0
1 1115	130	-----	0.326	-----	0.002	-----	0.170	---
1 1205	180	0.383	-----	0.002	-----	0.351	-----	0
1 1215	190	-----	0.544	-----	0.002	-----	0.127	---
1 1305	240	0.670	-----	0.003	-----	0.266	-----	0
1 1315	250	-----	0.635	-----	0.002	-----	0.101	---
1 1405	300	0.835	-----	0.006	-----	0.188	-----	0
1 1415	310	-----	0.644	-----	0.006	-----	0.085	---
1 1505	360	0.855	-----	0.008	-----	0.141	-----	0
1 1515	370	-----	0.624	-----	0.009	-----	0.073	---
1 1605	420	0.827	-----	0.009	-----	0.110	-----	0
1 1615	430	-----	0.601	-----	0.009	-----	0.063	---
2 720	1335	0.643	-----	0.011	-----	0.039	-----	0
2 815	1390	-----	0.476	-----	0.008	-----	0.032	---
2 905	1440	0.612	-----	0.008	-----	0.046	-----	0
2 915	1450	-----	0.444	-----	0.009	-----	0.042	---
2 1005	1500	0.583	-----	0.008	-----	0.049	-----	0
2 1015	1510	-----	0.416	-----	0.009	-----	0.048	---
2 1105	1560	0.555	-----	0.009	-----	0.045	-----	0
2 1115	1570	-----	0.390	-----	0.009	-----	0.042	---
2 1205	1620	0.534	-----	0.011	-----	0.047	-----	0
2 1215	1630	-----	0.373	-----	0.011	-----	0.043	---
2 1305	1680	0.509	-----	0.011	-----	0.047	-----	0
2 1315	1690	-----	0.354	-----	0.010	-----	0.047	---
2 1405	1740	0.495	-----	0.011	-----	0.050	-----	0
2 1415	1750	-----	0.328	-----	0.012	-----	0.049	---
2 1420	1755	-----	-----	-----	0.012 A	-----	0.048 A	---

----- NO DATA TAKEN

SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BK6800-2	SIDE 2 THC PPMC BK6800-2
0.004	0.004	0.007	0.007	1.17	1.17
0.188	-----	0.510	-----	29.30	-----
-----	0.107	-----	0.272	-----	29.00
0.322	-----	0.482	-----	28.30	-----
-----	0.214	-----	0.228	-----	28.20
0.405	-----	0.419	-----	27.70	-----
-----	0.170	-----	0.170	-----	27.00
0.351	-----	0.349	-----	26.90	-----
-----	0.127	-----	0.127	-----	26.20
0.266	-----	0.266	-----	25.20	-----
-----	0.101	-----	0.102	-----	25.70
0.188	-----	0.190	-----	24.20	-----
-----	0.085	-----	0.089	-----	25.20
0.141	-----	0.144	-----	23.80	-----
-----	0.073	-----	0.078	-----	25.20
0.110	-----	0.115	-----	23.40	-----
-----	0.063	-----	0.070	-----	25.00
0.039	-----	0.047	-----	22.60	-----
-----	0.032	-----	0.038	-----	24.00
0.046	-----	0.049	-----	22.70	-----
-----	0.042	-----	0.047	-----	24.50
0.049	-----	0.052	-----	-----	-----
-----	0.048	-----	0.052	-----	-----
0.045	-----	0.050	-----	23.70	-----
-----	0.042	-----	0.049	-----	24.80
0.047	-----	0.053	-----	22.40	-----
-----	0.043	-----	0.052	-----	24.00
0.047	-----	0.053	-----	22.40	-----
-----	0.047	-----	0.056	-----	24.60
0.050	-----	0.058	-----	22.70	-----
-----	0.049	-----	0.058	-----	24.60
-----	0.048 A	-----	0.057 A	-----	-----

AFF- 32
JP-4 (PETROLEUM); VARIABLE NOX
1980 AUG 28-29

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-2	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE #PART PART/ CLIN
1 620	-165	17.6	17.6	-----	0.4	0.4	2.	2
1 815	-50	23.7	-----	-----	0.5	-----	2.	-----
1 855	-10	-----	24.7	-----	-----	0.4	-----	3
1 1005	60	30.2	-----	2.65	53.0	-----	2.	-----
1 1015	70	-----	32.5	3.09	-----	52.0	-----	2
1 1105	120	33.2	-----	3.54	36.0	-----	1.	-----
1 1115	130	-----	36.0	3.62	-----	36.0	-----	1
1 1205	180	36.2	-----	3.54	23.0	-----	1.	-----
1 1215	190	-----	38.0	3.47	-----	23.0	-----	2
1 1305	240	37.7	-----	3.02	20.5	-----	22.	-----
1 1315	250	-----	37.8	2.84	-----	20.2	-----	8
1 1405	300	40.5	-----	2.05	15.2	-----	194.	-----
1 1415	310	-----	40.8	1.94	-----	15.5	-----	28
1 1505	360	38.8	-----	1.49	12.2	-----	312.	-----
1 1515	370	-----	38.8	1.12	-----	12.0	-----	61
1 1605	420	36.6	-----	0.93	9.2	-----	340.	-----
1 1615	430	-----	36.6	0.63	-----	9.0	-----	81
2 720	1335	23.4	-----	-----	0.7	-----	135.	-----
2 815	1390	-----	27.4	-----	-----	0.6	-----	7
2 905	1440	28.8	-----	2.05	0.6	-----	139.	-----
2 915	1450	-----	31.6	2.68	-----	1.3	-----	13
2 1005	1500	32.7	-----	3.21	0.7	-----	132.	-----
2 1015	1510	-----	34.6	3.54	-----	1.6	-----	18
2 1105	1560	36.0	-----	3.81	0.7	-----	105.	-----
2 1115	1570	-----	38.0	4.06	-----	1.3	-----	17
2 1205	1620	37.9	-----	3.58	0.7	-----	78.	-----
2 1215	1630	-----	40.5	3.58	-----	0.9	-----	13
2 1305	1680	39.5	-----	3.58	0.9	-----	73.	-----
2 1315	1690	-----	40.3	3.28	-----	0.9	-----	16
2 1405	1740	40.5	-----	2.91	0.6	-----	81.	-----
2 1415	1750	-----	38.0	2.73	-----	0.6	-----	16

----- NO DATA TAKEN

SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET
0.4	2.	2.	0.	0.	0.	0.
-----	2.	-----	0.	-----	0.	-----
0.4	-----	3.	-----	0.	-----	0.
-----	2.	-----	0.	-----	0.	-----
52.0	-----	2.	-----	0.	-----	0.
-----	1.	-----	0.	-----	0.	-----
36.0	-----	1.	-----	0.	-----	0.
-----	1.	-----	0.	-----	0.	-----
23.0	-----	2.	-----	0.	-----	0.
-----	22.	-----	0.	-----	0.	-----
20.2	-----	8.	-----	0.	-----	0.
-----	194.	-----	7.	-----	0.	-----
15.5	-----	28.	-----	0.	-----	0.
-----	312.	-----	4.	-----	0.	-----
12.0	-----	61.	-----	0.	-----	0.
-----	340.	-----	65.	-----	0.	-----
9.0	-----	81.	-----	1.	-----	-----
-----	135.	-----	6.	-----	0.	-----
0.6	-----	7.	-----	0.	-----	0.
-----	139.	-----	7.	-----	0.	-----
1.3	-----	13.	-----	0.	-----	0.
-----	132.	-----	8.	-----	0.	-----
1.6	-----	18.	-----	0.	-----	0.
-----	105.	-----	7.	-----	0.	-----
1.3	-----	17.	-----	0.	-----	0.
-----	78.	-----	8.	-----	0.	-----
0.9	-----	13.	-----	0.	-----	0.
-----	73.	-----	13.	-----	0.	-----
0.9	-----	10.	-----	0.	-----	0.
-----	81.	-----	13.	-----	0.	-----
0.6	-----	10.	-----	0.	-----	0.

AFF- 32
JP-4 (PETROLEUM); VARIABLE NOX
1980 AUG 28-29

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 BSCAT 10-4 M-1 MRI-388	SIDE 2 BSCAT 10-4 M-1 MRI-388	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UM3/CC TSI-023	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SI AE UM TSI
1 615	-170	-----	-----	-----	-----	-----	-----	---
1 620	-165	0.5	0.5	-0.	-0.	553.	553.	---
1 815	-50	0.6	-----	0.	-----	765.	-----	---
1 816	-49	-----	-----	-----	-----	-----	-----	---
1 855	-10	-----	0.8	-----	2.	-----	151.	---
1 858	-7	-----	-----	-----	-----	-----	-----	---
1 1005	60	0.4	-----	10.	-----	1.1E 05	-----	7
1 1015	70	-----	0.6	-----	18.	-----	9.1E 04	---
1 1105	120	0.7	-----	32.	-----	7.3E 04	-----	15
1 1115	130	-----	1.2	-----	59.	-----	6.7E 04	---
1 1155	170	-----	-----	-----	-----	-----	-----	---
1 1205	180	2.3	-----	79.	-----	4.9E 04	-----	25
1 1215	190	-----	3.6	-----	103.	-----	4.8E 04	---
1 1305	240	6.9	-----	133.	-----	3.8E 04	-----	33
1 1315	250	-----	5.2	-----	111.	-----	3.8E 04	---
1 1405	300	12.0	-----	143.	-----	2.7E 04	-----	32
1 1415	310	-----	5.5	-----	102.	-----	2.9E 04	---
1 1456	351	-----	-----	-----	-----	-----	-----	---
1 1505	360	15.0	-----	164.	-----	2.3E 04	-----	31
1 1515	370	-----	6.0	-----	96.	-----	2.3E 04	---
1 1605	420	15.5	-----	145.	-----	1.7E 04	-----	26
1 1615	430	-----	5.6	-----	83.	-----	1.6E 04	---
2 718	1333	-----	-----	-----	-----	-----	-----	---
2 720	1335	1.8	-----	7.	-----	1502.	-----	12
2 815	1390	-----	1.0	-----	3.	-----	2055.	---
2 816	1391	-----	-----	-----	-----	-----	-----	---
2 905	1440	1.7	-----	6.	-----	2097.	-----	10
2 915	1450	-----	1.0	-----	4.	-----	3200.	---
2 1005	1500	1.5	-----	6.	-----	2018.	-----	10
2 1015	1510	-----	0.9	-----	5.	-----	4115.	---
2 1105	1560	1.3	-----	5.	-----	4623.	-----	10
2 1115	1570	-----	0.9	-----	7.	-----	4845.	---
2 1205	1620	1.3	-----	7.	-----	2596.	-----	12
2 1215	1630	-----	1.0	-----	7.	-----	3038.	---
2 1305	1680	1.4	-----	5.	-----	1156.	-----	9
2 1306	1681	-----	-----	-----	-----	-----	-----	---
2 1315	1690	-----	1.0	-----	5.	-----	1338.	---
2 1405	1740	1.1	-----	7.	-----	671.	-----	9
2 1415	1750	-----	0.8	-----	5.	-----	884.	---
2 1417	1752	-----	-----	-----	-----	-----	-----	---

----- NO DATA TAKEN

SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 1 ACETYLEN PPM PN-1	SIDE 2 ACETYLEN PPM PN-1
-----	-----	-----	-----	0.0043	0.0043
553.	553.	3.	3.	-----	-----
765.	-----	10.	-----	-----	-----
-----	-----	-----	-----	0.0043	-----
-----	151.	-----	21.	-----	-----
-----	-----	-----	-----	-----	0.0048
1.1E 05	-----	722.	-----	-----	-----
-----	9.1E 04	-----	1125.	-----	-----
7.3E 04	-----	1560.	-----	-----	-----
-----	6.7E 04	-----	2326.	-----	-----
-----	-----	-----	-----	0.0046	-----
4.9E 04	-----	2592.	-----	-----	-----
-----	4.8E 04	-----	3092.	-----	-----
3.8E 04	-----	3319.	-----	-----	-----
-----	3.8E 04	-----	2949.	-----	0.0045
2.7E 04	-----	3267.	-----	-----	-----
-----	2.9E 04	-----	2515.	-----	-----
-----	-----	-----	-----	-----	0.0048
2.3E 04	-----	3127.	-----	-----	-----
-----	2.3E 04	-----	2190.	-----	-----
1.7E 04	-----	2653.	-----	0.0045	-----
-----	1.6E 04	-----	1832.	-----	-----
-----	-----	-----	-----	0.0051	-----
1502.	-----	125.	-----	-----	-----
-----	2055.	-----	64.	-----	-----
-----	-----	-----	-----	-----	0.0049
2097.	-----	107.	-----	-----	-----
-----	3200.	-----	89.	-----	-----
2018.	-----	107.	-----	-----	-----
-----	4115.	-----	142.	-----	-----
4623.	-----	107.	-----	-----	-----
-----	4845.	-----	176.	-----	-----
2596.	-----	124.	-----	-----	-----
-----	3038.	-----	166.	-----	-----
1156.	-----	97.	-----	-----	-----
-----	-----	-----	-----	0.0051	-----
-----	1338.	-----	107.	-----	-----
671.	-----	97.	-----	-----	-----
-----	884.	-----	88.	-----	-----
-----	-----	-----	-----	-----	0.0054

AFF- 32
 JP-4 (PETROLEUM); VARIABLE NOX
 1980 AUG 28-29

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PROPANE PPM DMS-1	SIDE 2 PROPANE PPM DMS-	SIDE 1 PROPENE PPM DMS-1	SIDE 2 PROPENE PPM DMS-1	SIDE 1 I-C4 PPM DMS-1	SIDE 2 I-C4 PPM DMS-1	SID N- PP DMS
1 615	-170	0.0043	0.0043	0.0007	0.0007	0.0031	0.0031	0.0
1 816	-49	0.0044	-----	0.0008	-----	-----	-----	0.0
1 858	-7	-----	0.0046	-----	0.0008	-----	-----	---
1 1155	170	0.0042	-----	0.0010	-----	-----	-----	0.0
1 1315	250	-----	0.0042	-----	0.0010	-----	-----	---
1 1456	351	-----	0.0044	-----	0.0008	-----	-----	---
1 1605	420	0.0041	-----	0.0005	-----	-----	-----	---
2 718	1333	0.0046	-----	0.0004	-----	-----	-----	0.0
2 816	1391	-----	0.0041	-----	0.0004	-----	-----	---
2 1306	1681	0.0049	-----	0.0016	-----	-----	-----	0.0
2 1417	1752	-----	0.0054	-----	0.0015	-----	-----	---

----- NO DATA TAKEN

	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
NE	I-C4	I-C4	N-C4	N-C4	1-C4=	1-C4=
	PPM	PPM	PPM	PPM	PPM	PPM
1	DMS-1	DMS-1	DMS-1	DMS-1	DMS-1	DMS-1
07	0.0031	0.0031	0.0032	0.0032	0.0001	0.0001
--	-----	-----	0.0043	-----	0.0003	-----
08	-----	-----	-----	0.0046	-----	0.0003
--	-----	-----	0.0043	-----	0.0003	-----
10	-----	-----	-----	0.0042	-----	0.0003
08	-----	-----	-----	-----	-----	0.0003
--	-----	-----	-----	-----	-----	-----
--	-----	-----	0.0043	-----	0.0001	-----
04	-----	-----	-----	0.0040	-----	-----
--	-----	-----	0.0041	-----	0.0007	-----
15	-----	-----	-----	0.0046	-----	0.0005

AFF- 32
 JP-4 (PETROLEUM) + VARIABLE NOX
 1980 AUG 28-29

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 I-C4= PPM DMS-1	SIDE 2 I-C4= PPM DMS-1	SIDE 1 I-C5 PPM DMS-1	SIDE 2 I-C5 PPM DMS-1	SIDE 1 N-C5 PPM DMS-1	SIDE 2 N-C5 PPM DMS-1	SI 2,2 P DM
1 615	-170	0.0001	0.0001	0.0004	0.0004	0.0002	0.0002	0.
1 816	-49	0.0002	-----	0.0167	-----	0.0216	-----	0.
1 858	-7	-----	0.0001	-----	0.0170	-----	214.8	--
1 1155	170	0.0002	-----	0.0161	-----	0.0209	-----	0.
1 1315	250	-----	0.0002	-----	0.0156	-----	0.0208	--
1 1456	351	-----	0.0002	-----	0.0156	-----	0.0200	--
1 1605	420	-----	-----	0.0145	-----	0.0200	-----	0.
2 718	1333	0.0002	-----	0.0151	-----	0.0195	-----	0.
2 816	1391	-----	-----	-----	0.0145	-----	-----	--
2 1306	1681	0.0000	-----	0.0143	-----	0.0195	-----	0.
2 1417	1752	-----	0.0003	-----	0.0153	-----	0.0207	--

----- NO DATA TAKEN

SIDE 1 N-C5 PPM DMS-1	SIDE 2 N-C5 PPM DMS-1	SIDE 1 2,2-DMB PPM DMS-1	SIDE 2 2,2-DMB PPM DMS-1	SIDE 1 2,3-DMB PPM DMS-1	SIDE 2 2,3-DMB PPM DMS-1
0.0002	0.0002	0.0000	0.0000	0.0002	0.0002
0.0216	-----	0.0021	-----	0.0056	-----
-----	214.8	-----	0.0021	-----	0.0121
0.0209	-----	0.0020	-----	0.0060	-----
-----	0.0208	-----	0.0017	-----	0.0045
-----	0.0200	-----	0.0021	-----	0.0057
0.0200	-----	0.0019	-----	0.0066	-----
0.0195	-----	0.0020	-----	0.0045	-----
-----	-----	-----	0.0014	-----	0.0045
0.0195	-----	0.0022	-----	0.0047	-----
-----	0.0207	-----	0.0024	-----	0.0021

AFF- 32
 JP-4 (PETROLEUM); VARIABLE NOX
 1980 AUG 28-29

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 2ME-C5 PPM DMS-1	SIDE 2 2ME-C5 PPM DMS-1	SIDE 1 3ME-C5 PPM DMS-1	SIDE 2 3ME-C5 PPM DMS-1	SIDE 1 CYCL-C5 PPM DMS-1	SIDE 2 CYCL-C5 PPM DMS-1	SIDE 1 CYCL-C5 PPM DMS-1	SIDE 2 CYCL-C5 PPM DMS-1	SE
1 615	-170	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	--
1 715	-110	-----	-----	-----	-----	-----	-----	-----	-----	0.
1 816	-49	0.0347	-----	0.0255	-----	0.0040	-----	-----	-----	--
1 858	-7	-----	0.0440	-----	0.0305	-----	0.0040	-----	-----	--
1 1015	70	-----	-----	-----	-----	-----	-----	-----	-----	--
1 1105	120	-----	-----	-----	-----	-----	-----	-----	-----	0.
1 1155	170	0.0355	-----	0.0237	-----	0.0037	-----	-----	-----	0.
1 1315	250	-----	0.0315	-----	0.0244	-----	0.0052	-----	-----	--
1 1406	301	-----	-----	-----	-----	-----	-----	-----	-----	0.
1 1456	351	-----	0.0332	-----	0.0241	-----	0.0045	-----	-----	--
1 1605	420	0.0363	-----	0.0162	-----	-----	-----	-----	-----	0.
2 718	1333	0.0308	-----	0.0228	-----	0.0045	-----	-----	-----	0.
2 816	1391	-----	0.0289	-----	0.0212	-----	0.0024	-----	-----	--
2 917	1452	-----	-----	-----	-----	-----	-----	-----	-----	0.
2 1016	1511	-----	-----	-----	-----	-----	-----	-----	-----	--
2 1106	1561	-----	-----	-----	-----	-----	-----	-----	-----	0.
2 1216	1631	-----	-----	-----	-----	-----	-----	-----	-----	--
2 1306	1681	0.0298	-----	0.0212	-----	0.0029	-----	-----	-----	0.
2 1417	1752	-----	0.0261	-----	0.0222	-----	0.0047	-----	-----	--

----- NO DATA TAKEN

	SIDE 1 CYCL-C5 PPM DMS-1	SIDE 2 CYCL-C5 PPM DMS-1	SIDE 1 N-C6 PPM SE-52C-2	SIDE 1 N-C6 PPM DMS-1	SIDE 2 N-C6 PPM SE-52C-2	SIDE 2 N-C6 PPM DMS-1
000	0.0000	0.0000	-----	0.0000	-----	0.0000
---	-----	-----	0.0247	-----	0.0247	-----
---	0.0040	-----	-----	0.0694	-----	-----
305	-----	0.0040	-----	-----	-----	0.0676
---	-----	-----	-----	-----	0.0229	-----
---	-----	-----	0.0195	-----	-----	-----
---	0.0037	-----	0.0187	0.0660	-----	-----
244	-----	0.0052	-----	-----	0.0206	0.0625
---	-----	-----	0.0177	-----	-----	-----
241	-----	0.0045	-----	-----	0.0179	0.0647
---	-----	-----	0.0188	0.0592	-----	-----
---	0.0045	-----	0.0222	0.0595	-----	-----
212	-----	0.0024	-----	-----	0.0218	0.0578
---	-----	-----	0.0178	-----	-----	-----
---	-----	-----	-----	-----	0.0196	-----
---	-----	-----	0.0179	-----	-----	-----
---	-----	-----	-----	-----	0.0189	-----
---	0.0029	-----	0.0175	0.0585	-----	-----
22	-----	0.0047	-----	-----	0.0202	0.0600

AFF- 32
 JP-4 (PETROLEUM); VARIABLE NOX
 1980 AUG 28-29

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 N-C7 PPM SE-52C-2	SIDE 2 N-C7 PPM SE-52C-2	SIDE 1 N-C8 PPM SE-52C-2	SIDE 2 N-C8 PPM SE-52C-2	SIDE 1 N-C9 PPM SE-52C-2	SIDE 2 N-C9 PPM SE-52C-2	SID C1 PP SE-5
1 615	-170	-----	-----	-----	-----	-----	-----	---
1 715	-110	0.0232	0.0232	0.2092	0.2092	0.0151	0.0151	0.0
1 1015	70	-----	0.0218	-----	0.1980	-----	0.0147	---
1 1105	120	0.0190	-----	0.1751	-----	0.0132	-----	0.0
1 1155	170	0.0182	-----	0.1672	-----	0.0127	-----	0.0
1 1315	250	-----	0.0199	-----	0.1786	-----	0.0133	---
1 1406	301	0.0172	-----	0.1560	-----	0.0118	-----	0.0
1 1456	351	-----	0.0175	-----	0.1538	-----	0.0120	---
1 1605	420	0.0182	-----	0.1614	-----	0.0121	-----	0.0
2 718	1333	0.0192	-----	0.1671	-----	0.0120	-----	0.0
2 816	1391	-----	0.0207	-----	0.1818	-----	0.0133	---
2 917	1452	0.0169	-----	0.1512	-----	0.0113	-----	0.0
2 1016	1511	-----	0.0191	-----	0.1709	-----	0.0127	---
2 1106	1561	0.0172	-----	0.1516	-----	0.0116	-----	0.0
2 1216	1631	-----	0.0183	-----	0.1609	-----	0.0122	---
2 1306	1681	0.0169	-----	0.1496	-----	0.0113	-----	0.0
2 1417	1752	-----	0.0193	-----	0.1703	-----	0.0125	---

----- NO DATA TAKEN

	SIDE 1 N-C9 PPM	SIDE 2 N-C9 PPM	SIDE 1 C10 PPM	SIDE 2 C10 PPM	SIDE 1 C11 PPM	SIDE 2 C11 PPM	BENZENE PPM 10'C-600
C-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2	
92	0.0151	0.0151	0.0178	0.0178	0.0256	0.0256	0.0003
80	0.0132	0.0147	0.0168	0.0177	0.0258	0.0270	
	0.0127		0.0156		0.0231		
86	0.0118	0.0133	0.0143	0.0166	0.0207	0.0248	
88	0.0121	0.0120	0.0140	0.0149	0.0206	0.0217	
	0.0120		0.0141		0.0197		
8	0.0113	0.0133	0.0126	0.0154	0.0182	0.0211	
9	0.0116	0.0127	0.0129	0.0150	0.0186	0.0209	
9	0.0113	0.0122	0.0136	0.0139	0.0196	0.0202	
3		0.0125		0.0146		0.0199	

2

AFF- 32

JP-4 (PETROLEUM); VARIABLE NOX
1980 AUG 28-29

CLOCK TIME		ELAPSED TIME	SIDE 1 TOLUENE PPM	SIDE 1 TOLUENE PPM	SIDE 2 TOLUENE PPM	SIDE 2 TOLUENE PPM	SIDE 1 124TMEBZ RAW DATA	SIDE 2 124TMEBZ RAW DATA	SIDE 1 M+P-3 PPM
DY	HR.	(MIN)	SE-52C-2	10'C-600	SE-52C-2	10'C-600	SE-52C-2	SE-52C-2	SE-52C-2
1	615	-170	-----	0.0001	-----	0.0001	-----	-----	-----
1	715	-110	0.0631	-----	0.0631	-----	6028.	6028.	0.00
1	816	-49	-----	0.0300	-----	-----	-----	-----	-----
1	858	-7	-----	-----	-----	0.0306	-----	-----	-----
1	1015	70	-----	-----	0.0595	-----	-----	5645.	-----
1	1105	120	0.0524	-----	-----	-----	5508.	-----	0.00
1	1155	170	0.0507	0.0280	-----	-----	4534.	-----	0.00
1	1231	206	-----	-----	-----	0.0289	-----	-----	-----
1	1315	250	-----	-----	0.0544	-----	-----	4850.	-----
1	1406	301	0.0476	-----	-----	-----	3677.	-----	0.00
1	1456	351	-----	-----	0.0483	0.0280	-----	3909.	-----
1	1530	385	-----	0.0271	-----	-----	-----	-----	-----
1	1605	420	0.0496	-----	-----	---	3280.	-----	0.00
2	718	1333	0.0520	0.0280	-----	-----	3183.	-----	0.00
2	816	1391	-----	-----	0.0560	0.0280	-----	3729.	-----
2	917	1452	0.0465	-----	-----	-----	2713.	-----	0.00
2	1016	1511	-----	-----	0.0521	-----	-----	3670.	-----
2	1106	1561	0.0473	-----	-----	-----	2749.	-----	0.00
2	1216	1631	-----	-----	0.0497	-----	-----	3188.	-----
2	1306	1681	0.0458	0.0254	-----	-----	2949.	-----	0.00
2	1417	1752	-----	-----	0.0522	0.0263	-----	3337.	-----

----- NO DATA TAKEN

	SIDE 1 124TMEBZ RAW DATA SE-52C-2	SIDE 2 124TMEBZ RAW DATA SE-52C-2	SIDE 1 M+P-XYL PPM SE-52C-2	SIDE 2 M+P-XYL PPM SE-52C-2	SIDE 1 FREON 12 RAW DATA DMS-1	SIDE 2 FREON 12 RAW DATA DMS-1
01	-----	-----	-----	-----	-----	-----
	6028.	6028.	0.0095	0.0095	-----	-----
	-----	-----	-----	-----	311.8	-----
06	-----	-----	-----	-----	-----	310.3
	-----	5645.	-----	0.0092	-----	-----
	5508.	-----	0.0081	-----	-----	-----
	4534.	-----	0.0076	-----	307.7	-----
09	-----	-----	-----	-----	-----	-----
	-----	4850.	-----	0.0078	-----	297.0
	3677.	-----	0.0065	-----	-----	-----
30	-----	3909.	-----	0.0069	-----	306.7
	-----	-----	-----	-----	-----	-----
	3280.	-----	0.0065	-----	297.5	-----
	3183.	-----	0.0066	-----	291.3	-----
30	-----	3729.	-----	0.0074	-----	259.6
	2713.	-----	0.0060	-----	-----	-----
	-----	3670.	-----	0.0069	-----	-----
	2749.	-----	0.0060	-----	-----	-----
	-----	3188.	-----	0.0064	-----	-----
	2949.	-----	0.0057	-----	290.3	-----
33	-----	3337.	-----	0.0065	-----	300.5

AFF- 32
JP-4 (PETROLEUM); VARIABLE NOX
1980 AUG 28-29

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 CO PPM BK6800-2	SIDE 2 CO PPM BK6800-2	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA	SIDE 1 ACETALD PPM 10'C-600	SIDE 2 ACETALD PPM 10'C-600	SIDE PROP PPM 10'C
1 615	-170	-----	-----	-----	-----	0.0034	0.0034	---
1 620	-165	1.64	1.64	-----	-----	-----	-----	---
1 737	-88	-----	-----	0.008	0.008	-----	-----	---
1 815	-50	1.70	-----	-----	-----	-----	-----	---
1 816	-49	-----	-----	-----	-----	0.3625	-----	---
1 855	-10	-----	1.78	-----	-----	-----	0.3629	---
1 858	-7	-----	-----	-----	-----	-----	-----	---
1 1005	60	1.71	-----	-----	-----	-----	-----	---
1 1015	70	-----	1.60	-----	-----	-----	-----	---
1 1105	120	1.62	-----	-----	-----	-----	-----	---
1 1115	130	-----	1.66	-----	-----	-----	-----	---
1 1150	165	-----	-----	0.063	-----	-----	-----	---
1 1155	170	-----	-----	-----	-----	0.3382	-----	---
1 1205	180	1.73	-----	-----	-----	-----	-----	---
1 1215	190	-----	1.71	-----	0.044	-----	0.3399	---
1 1231	206	-----	-----	-----	-----	-----	-----	---
1 1305	240	1.64	-----	-----	-----	-----	-----	---
1 1315	250	-----	1.82	-----	-----	-----	-----	---
1 1405	300	1.82	-----	-----	-----	-----	-----	---
1 1415	310	-----	1.90	-----	-----	-----	-----	---
1 1456	351	-----	-----	-----	-----	-----	0.3282	---
1 1505	360	1.89	-----	-----	-----	-----	-----	---
1 1515	370	-----	1.92	-----	-----	-----	-----	---
1 1530	385	-----	-----	-----	-----	0.3181	-----	---
1 1545	400	-----	-----	-----	0.098	-----	-----	---
1 1605	420	1.89	-----	-----	-----	-----	-----	---
1 1611	426	-----	-----	0.130	-----	-----	-----	---
1 1615	430	-----	1.92	-----	-----	-----	-----	---
2 718	1333	-----	-----	-----	-----	0.3348	-----	---
2 720	1335	2.00	-----	-----	-----	-----	-----	---
2 745	1360	-----	-----	0.167	-----	-----	-----	---
2 811	1386	-----	-----	-----	0.119	-----	-----	---
2 815	1390	-----	2.05	-----	-----	-----	0.3282	---
2 816	1391	-----	-----	-----	-----	-----	-----	---
2 905	1440	2.06	-----	-----	-----	-----	-----	---
2 915	1450	-----	2.11	-----	-----	-----	-----	---
2 1005	1500	-----	-----	-----	-----	-----	-----	---
2 1015	1510	-----	-----	-----	-----	-----	-----	---
2 1105	1560	2.34	-----	-----	-----	-----	-----	---
2 1115	1570	-----	2.22	-----	-----	-----	-----	---
2 1144	1599	-----	-----	-----	0.117	-----	-----	---
2 1205	1620	2.07	-----	-----	-----	-----	-----	---
2 1214	1629	-----	-----	0.148	-----	-----	-----	---
2 1215	1630	-----	2.26	-----	-----	-----	-----	---
2 1305	1680	2.16	-----	-----	-----	-----	-----	---
2 1306	1681	-----	-----	-----	-----	0.3256	-----	---
2 1315	1690	-----	2.37	-----	-----	-----	-----	---
2 1347	1722	-----	-----	0.130	-----	-----	-----	---
2 1405	1740	2.30	-----	-----	-----	-----	-----	---
2 1412	1747	-----	-----	-----	0.121	-----	-----	---
2 1415	1750	-----	2.49	-----	-----	-----	-----	---

----- NO DATA TAKEN

SIDE 1 ACETALD PPM 10'C-600	SIDE 2 ACETALD PPM 10'C-600	SIDE 1 PROPALD PPM 10'C-600	SIDE 2 PROPALD PPM 10'C-600	ACETONE PPM 10'C-600	MEK PPM 10'C-600
0.0034	0.0034	-----	-----	0.0030	0.0002
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
0.3625	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	0.3629	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
0.3382	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	0.3399	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	0.3282	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
0.3181	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
0.3348	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	0.3282	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
0.3256	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----

AFF- 32

JF-4 (PETROLEUM); VARIABLE NOX
1980 AUG 28-29

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 CO PPM BK6800-2	SIDE 2 CO PPM BK6800-2	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA	SIDE 1 ACETALD PPM 10'C-600	SIDE 2 ACETALD PPM 10'C-600	SIDE PROPI PPM 10'C
2 1417	1752	-----	-----	-----	-----	-----	0.3265	----

----- NO DATA TAKEN

	SIDE 1	SIDE 2	SIDE 1	SIDE 2		
	ACETALD	ACETALD	PROPALD	PROPALD	ACETONE	MEK
	PPM	PPM	PPM	PPM	PPM	PPM
E 2	10'C-600	10'C-600	10'C-600	10'C-600	10'C-600	10'C-600
HO	-----	0.3265	-----	-----	-----	-----
M						
A						

AFF- 32
 JP-4 (PETROLEUM); VARIABLE NOX
 1980 AUG 20-29

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023	SIDE 1 PART.042 PART/CC TSI-023	SIDE 2 PART.042 PART/CC TSI-023	SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023	SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023
1 620	-165	334.	334.	87.	87.	44.	44.		
1 815	-50	668.	-----	0.	-----	0.	-----		
1 855	-10	-----	-334.	-----	174.	-----	178.		
1 1005	60	5.9E 04	-----	3.2E 04	-----	1.7E 04	-----	180	
1 1015	70	-----	1.1E 04	-----	4.4E 04	-----	3.2E 04		
1 1105	120	1.7E 04	-----	5916.	-----	3.8E 04	-----	1.2	
1 1115	130	-----	5010.	-----	1218.	-----	3.6E 04		
1 1205	180	1002.	-----	957.	-----	1.7E 04	-----	2.7	
1 1215	190	-----	-2004.	-----	783.	-----	1.3E 04		
1 1305	240	1670.	-----	783.	-----	2220.	-----	2.4	
1 1315	250	-----	1503.	-----	783.	-----	4928.		
1 1405	300	-1670.	-----	2697.	-----	0.	-----	1.6	
1 1415	310	-----	3173.	-----	-957.	-----	2575.		
1 1505	360	1503.	-----	696.	-----	89.	-----	1.0	
1 1515	370	-----	1336.	-----	1914.	-----	355.		
1 1605	420	0.	-----	1479.	-----	444.	-----	645	
1 1615	430	-----	-1503.	-----	783.	-----	1643.		
2 720	1335	334.	-----	174.	-----	355.	-----	31	
2 815	1390	-----	1169.	-----	0.	-----	355.		
2 905	1440	835.	-----	174.	-----	533.	-----	31	
2 915	1450	-----	1336.	-----	609.	-----	533.		
2 1005	1500	334.	-----	522.	-----	577.	-----	38	
2 1015	1510	-----	1336.	-----	261.	-----	1021.		
2 1105	1560	4175.	-----	-870.	-----	533.	-----	57	
2 1115	1570	-----	2171.	-----	348.	-----	710.		
2 1205	1620	1169.	-----	261.	-----	355.	-----	53	
2 1215	1630	-----	1002.	-----	348.	-----	355.		
2 1305	1680	334.	-----	261.	-----	44.	-----	21	
2 1315	1690	-----	334.	-----	261.	-----	0.		
2 1405	1740	167.	-----	87.	-----	0.	-----	14	
2 1415	1750	-----	167.	-----	87.	-----	133.		

----- NO DATA TAKEN

SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023	SIDE 1 PART.133 PART/CC TSI-023	SIDE 2 PART.133 PART/CC TSI-023	SIDE 1 PART.237 PART/CC TSI-023	SIDE 2 PART.237 PART/CC TSI-023
44.	44.	96.	96.	-12.	-12.
0.	-----	72.	-----	25.	-----
-----	178.	-----	121.	-----	12.
1.7E 04	-----	1807.	-----	123.	-----
-----	3.2E 04	-----	3687.	-----	295.
3.8E 04	-----	1.2E 04	-----	775.	-----
-----	3.6E 04	-----	2.2E 04	-----	1722.
1.7E 04	-----	2.7E 04	-----	3259.	-----
-----	1.3E 04	-----	3.1E 04	-----	4625.
2220.	-----	2.4E 04	-----	7552.	-----
-----	4928.	-----	2.5E 04	-----	5953.
0.	-----	1.6E 04	-----	8561.	-----
-----	2575.	-----	1.8E 04	-----	5781.
89.	-----	1.0E 04	-----	8450.	-----
-----	355.	-----	1.4E 04	-----	5351.
444.	-----	6459.	-----	7405.	-----
-----	1643.	-----	9688.	-----	4686.
355.	-----	313.	-----	258.	-----
-----	355.	-----	386.	-----	135.
533.	-----	313.	-----	185.	-----
-----	533.	-----	578.	-----	123.
577.	-----	386.	-----	135.	-----
-----	1021.	-----	1301.	-----	172.
533.	-----	578.	-----	160.	-----
-----	710.	-----	1253.	-----	332.
355.	-----	530.	-----	234.	-----
-----	355.	-----	916.	-----	357.
44.	-----	217.	-----	246.	-----
-----	0.	-----	410.	-----	283.
0.	-----	145.	-----	221.	-----
-----	133.	-----	241.	-----	209.

AFF- 32
JP-4 (PETROLEUM); VARIABLE NOX
1980 AUG 28-29

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2
		PART.422 PART/CC TSI-023	PART.422 PART/CC TSI-023	PART.750 PART/CC TSI-023	PART.750 PART/CC TSI-023
1 620	-165	7.	7.	-4.	-4.
1 815	-50	0.	-----	0.	-----
1 855	-10	-----	-7.	-----	7.
1 1005	60	0.	-----	7.	-----
1 1015	70	-----	47.	-----	4.
1 1105	120	60.	-----	4.	-----
1 1115	130	-----	160.	-----	25.
1 1205	180	267.	-----	42.	-----
1 1215	190	-----	387.	-----	67.
1 1305	240	740.	-----	95.	-----
1 1315	250	-----	520.	-----	81.
1 1405	300	1347.	-----	46.	-----
1 1415	310	-----	527.	-----	84.
1 1505	360	1267.	-----	193.	-----
1 1515	370	-----	574.	-----	88.
1 1605	420	1187.	-----	175.	-----
1 1615	430	-----	527.	-----	81.
2 720	1335	53.	-----	14.	-----
2 815	1390	-----	7.	-----	4.
2 905	1440	47.	-----	11.	-----
2 915	1450	-----	13.	-----	7.
2 1005	1500	53.	-----	11.	-----
2 1015	1510	-----	20.	-----	4.
2 1105	1560	40.	-----	7.	-----
2 1115	1570	-----	20.	-----	11.
2 1205	1620	33.	-----	14.	-----
2 1215	1630	-----	53.	-----	7.
2 1305	1680	47.	-----	7.	-----
2 1315	1690	-----	47.	-----	4.
2 1405	1740	33.	-----	18.	-----
2 1415	1750	-----	40.	-----	7.

----- NO DATA TAKEN

NOTES

A SIDE B WITH NYLON FILTER IN LINE.

AFF- 33
JP-4 (PETROLEUM): 3-DAY DYNAMIC
1980 SEP 3-5

DAY 1 (SEPTEMBER 3)

0626: BAG FILLED WITH PURE AIR.
0638: WET BULB= 7.3 C, DRY BULB= 15.8 C, R.H.=29%
0711: 4.0 ML NO2 INJECTED
0713: 12.0 ML NO INJECTED
0718: 140 ML FREON 12 ADDED
0720: 570 MICROLITERS JP-4 (PETROLEUM) ADDED
0830: BAG UNCOVERED
PURE AIR ADDED TO BAG: 930,1030,1130,1230,1333,1430,1538
AIR DUMPED FROM BAG: 1228,1330,1428,1528
OVERALL DILUTION, DAY 1= 0.487

DAY 2 (SEPTEMBER 4)

PURE AIR ADDED TO BAG: 937,1030,1130,1230,1330,1430,1530
AIR DUMPED FROM BAG: 1425,1528
OVERALL DILUTION, DAY 2= 0.490

DAY 3 (SEPTEMBER 5)

PURE AIR ADDED TO BAG: 931,1030,1130,1230
AIR DUMPED FROM BAG: 1325,1425
OVERALL DILUTION, DAY 3= 0.536

NOTE: NO GC DATA FOR FUEL COMPONENTS ON DAY 2 AND 3 DUE TO
INSTRUMENT MALFUNCTION.

RESULTS	DAY 1	DAY 2	DAY 3
-----	-----	-----	-----
AVG.T(DEG.C)	35(+5)	37(+3)	37(+3)
AVG.UV(MW/CM2)	2.3(+0.9)	2.1(+0.7)	2.2(+0.5)

T=0 AT 830 PST

BAG NO. 17 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	35.0	6.4	DEG C
UV RAD	EPPLEY-2	2.20	0.71	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.319	PPM
NO2-UNC	B-NOX-1	0.119	PPM
THC	BK6800-2	26.20	PPMC

AFF- 33
JP-4 (PETROLEUM); 3-DAY DYNAMIC
1980 SEP 3-5

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
2100	PN-1	RM-121 POROPAK-N GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
2750	SE-52C-2	RM-121; 30M SE-52 QUARTZ CAP. GC; FID
2390	SE-52C-1	RM-103;30M SE-52 GLASS CAPILLARY GC;FID
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
1600	BK6800-2	BECKMAN CO,HC ANALYZER SN:100016
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2000	ECD-1	RM-121; 12' 5% CARBOWAX-400 GC; ECD
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG

AFF- 33
JP-4 (PETROLEUM): 3-DAY DYNAMIC
1980 SEP 3-5

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	THC PPMC BK6800-2	T DEG C DORIC-1	UV MW/ EPPL
1 640	-110	0.000	0.000	0.000	0.000	1.42	15.5	---
1 750	-40	0.002	0.319	0.119	0.452	26.20	19.3	---
1 810	-20	-----	-----	-----	-----	-----	-----	---
1 905	35	0.007	0.258	0.164	0.442	26.30	25.8	1.
1 1005	95	0.025	0.103	0.257	0.369	23.50	29.6	2.
1 1105	155	0.126	0.012	0.281	0.289	20.50	35.0	3.
1 1106	156	-----	-----	-----	-----	-----	-----	---
1 1205	215	0.313	0.002	0.220	0.219	18.00	37.8	3.
1 1207	217	-----	-----	-----	-----	-----	-----	---
1 1304	274	-----	-----	-----	-----	-----	-----	---
1 1305	275	0.457	0.001	0.152	0.151	15.10	39.0	2.
1 1404	334	-----	-----	-----	-----	-----	-----	---
1 1405	335	0.530	0.002	0.108	0.110	13.00	39.3	2.
1 1505	395	0.516	0.007	0.081	0.084	11.40	38.5	1.
1 1507	397	-----	-----	-----	-----	-----	-----	---
1 1605	455	0.466	0.007	0.062	0.068	10.20	34.2	0.
1 1606	456	-----	-----	-----	-----	-----	-----	---
2 727	1377	-----	-----	-----	-----	-----	-----	---
2 905	1475	0.341	0.009	0.032	0.038	9.86	31.5	1.
2 923	1493	-----	-----	-----	-----	-----	-----	---
2 1005	1533	0.307	0.008	0.033	0.038	9.19	35.0	2.
2 1006	1536	-----	-----	-----	-----	-----	-----	---
2 1105	1595	0.297	0.008	0.031	0.037	8.29	38.5	2.
2 1106	1596	-----	-----	-----	-----	-----	-----	---
2 1205	1655	0.274	0.008	0.028	0.032	7.52	39.5	2.
2 1206	1656	-----	-----	-----	-----	-----	-----	---
2 1304	1714	-----	-----	-----	-----	-----	-----	---
2 1305	1715	0.254	0.007	0.027	0.031	7.09	40.4	2.
2 1403	1773	-----	-----	-----	-----	-----	-----	---
2 1405	1775	0.228	0.007	0.022	0.027	6.13	40.1	1.
2 1505	1835	0.206	0.008	0.021	0.027	5.66	37.8	1.
2 1605	1895	0.184	0.004	0.017	0.020	5.22	35.5	0.
3 905	2915	0.140	0.007	0.027	0.032	4.77	32.1	1.
3 906	2916	-----	-----	-----	-----	-----	-----	---
3 1005	2975	0.151	0.005	0.026	0.029	4.15	36.1	2.
3 1105	3035	0.162	0.007	0.022	0.027	3.90	39.3	2.
3 1205	3095	0.172	0.004	0.021	0.024	3.86	39.5	2.
3 1206	3096	-----	-----	-----	-----	-----	-----	---
3 1305	3155	0.176	0.004	0.019	0.023	3.57	39.5	2.
3 1405	3215	0.170	0.003	0.019	0.022	3.35	38.5	1.
3 1406	3216	-----	-----	-----	-----	-----	-----	---
3 1505	3275	-----	-----	-----	-----	-----	-----	---
3 1506	3276	0.160	0.002	0.018	0.020	3.21	37.4	1.

----- NO DATA TAKEN

NC	THC PPMC BK6800-2	T DEG C DORIC-1	UV RAD MW/CM2 EPFLEY-2	FREON 12 RAW DATA DMS-1	CONDENS 10E3/CC CNC-143	#PART>.3 PART/CC CLIMET	#PART>.5 PART/CC CLIMET
00	1.42	15.5	-----	-----	0.5	4.	1.
52	26.20	19.3	-----	4.712	0.5	5.	1.
			-----	4.688	-----	-----	-----
42	26.30	25.8	1.87	4.704	61.0	6.	0.
69	23.50	29.6	2.76	4.240	35.0	5.	1.
89	20.50	35.0	3.36	-----	24.2	5.	0.
			-----	3.760	-----	-----	-----
19	18.00	37.8	3.13	-----	17.8	3.	0.
			-----	3.504	-----	-----	-----
			-----	3.104	-----	-----	-----
51	15.10	39.0	2.87	-----	12.8	4.	0.
			-----	2.760	-----	-----	-----
10	13.00	39.3	2.16	-----	9.0	8.	0.
84	11.40	38.5	1.46	-----	7.3	32.	1.
			-----	2.536	-----	-----	-----
68	10.20	34.2	0.78	-----	5.5	46.	1.
			-----	2.288	-----	-----	-----
			-----	2.168	-----	-----	-----
38	9.86	31.5	1.94	-----	0.8	28.	2.
			-----	2.196	-----	-----	-----
38	9.19	35.0	2.54	-----	0.8	24.	1.
			-----	1.996	-----	-----	-----
37	8.29	38.5	2.95	-----	0.8	22.	1.
			-----	1.860	-----	-----	-----
32	7.52	39.5	2.95	-----	0.6	18.	1.
			-----	1.656	-----	-----	-----
			-----	1.492	-----	-----	-----
31	7.09	40.4	2.38	-----	0.8	19.	1.
			-----	1.320	-----	-----	-----
27	6.13	40.1	1.94	-----	0.7	19.	1.
27	5.66	37.8	1.49	1.192	0.5	18.	1.
20	5.22	35.5	0.78	1.076	0.8	17.	1.
			-----	-----	3.2	26.	4.
32	4.77	32.1	1.68	-----	0.940	-----	-----
			-----	0.868	3.0	16.	2.
29	4.15	36.1	2.68	0.732	3.5	19.	3.
27	3.90	39.3	2.87	-----	3.6	17.	2.
24	3.86	39.5	2.31	-----	0.640	-----	-----
			-----	0.614	3.9	16.	2.
23	3.57	39.5	2.38	-----	3.4	12.	1.
22	3.35	38.5	1.98	-----	0.556	-----	-----
			-----	0.504	-----	-----	-----
20	3.21	37.4	1.41	-----	2.9	10.	1.

AFF- 33
JP-4 (PETROLEUM): 3-DAY DYNAMIC
1980 SEP 3-5

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	#PART>1 PART/CC CLIMET	BSCAT 10-4 M-1 MRI-388	AER.V UM3/CC TSI-023	AER.N PART/CC TSI-023	AER.S UM2/CC TSI-023	C5-ISOMS PPM SE-52C-2	SE
1 640	-110	0.	0.7	0.	-30.	4.	-----	--
1 750	-40	0.	0.8	0.	192.	6.	-----	--
1 751	-39	-----	-----	-----	-----	-----	0.0091	0
1 905	35	0.	0.9	1.	6.3E 04	125.	-----	--
1 906	36	-----	-----	-----	-----	-----	0.0079	0
1 1005	95	0.	0.9	8.	7.0E 04	570.	0.0065	0
1 1105	155	0.	0.9	28.	4.5E 04	1182.	-----	--
1 1106	156	-----	-----	-----	-----	-----	0.0058	0
1 1205	215	0.	1.4	53.	3.5E 04	1731.	-----	--
1 1207	217	-----	-----	-----	-----	-----	0.0056	0
1 1304	274	-----	-----	-----	-----	-----	0.0045	0
1 1305	275	0.	2.9	70.	2.5E 04	1877.	-----	--
1 1404	334	-----	-----	-----	-----	-----	0.0042	0
1 1405	335	0.	4.2	78.	1.7E 04	1766.	-----	--
1 1505	395	0.	4.7	67.	1.2E 04	1431.	-----	--
1 1513	403	-----	-----	-----	-----	-----	0.0043	0
1 1605	455	0.	4.7	59.	9221.	1166.	-----	--
2 905	1475	0.	1.2	4.	2131.	87.	-----	--
2 1005	1535	0.	1.1	3.	1648.	79.	-----	--
2 1105	1595	0.	1.3	4.	1444.	102.	-----	--
2 1205	1655	0.	1.3	5.	1116.	116.	-----	--
2 1305	1715	0.	1.3	6.	971.	122.	-----	--
2 1405	1775	0.	1.3	6.	1449.	119.	-----	--
2 1505	1835	0.	1.1	4.	1285.	94.	-----	--
2 1605	1895	0.	1.2	5.	1235.	90.	-----	--
3 905	2915	0.	1.3	4.	6752.	141.	-----	--
3 1005	2975	0.	0.8	4.	5472.	146.	-----	--
3 1105	3035	0.	1.2	8.	4409.	203.	-----	--
3 1205	3095	0.	1.3	8.	6461.	234.	-----	--
3 1305	3155	0.	1.2	8.	6441.	256.	-----	--
3 1405	3215	0.	1.2	8.	6035.	242.	-----	--
3 1506	3276	0.	1.1	6.	5014.	211.	-----	--

----- NO DATA TAKEN

N /CC 023	AER.S UM2/CC TSI-023	C5-ISONIS PPM SE-52C-2	N-C6 PPM SE-52C-1	N-C7 PPM SE-52C-2	N-C8 PPM SE-52C-2	N-C9 PPM SE-52C-1	C10 PPM SE-52C-2
0.	4.	-----	-----	-----	-----	-----	-----
2.	6.	-----	-----	-----	-----	-----	-----
---	---	0.0091	0.0280	0.0198	0.1610	0.0114	0.0137
E 04	125.	-----	-----	-----	-----	-----	-----
---	---	0.0079	0.0247	0.0178	0.1492	0.0109	0.0133
E 04	570.	0.0065	0.0204	0.0151	0.1271	0.0094	0.0115
E 04	1182.	-----	-----	-----	-----	-----	-----
---	---	0.0058	0.0189	0.0135	0.1122	0.0082	0.0101
E 04	1731.	-----	-----	-----	-----	-----	-----
---	---	0.0056	0.0180	0.0129	0.1044	0.0076	0.0089
---	---	0.0045	0.0145	0.0104	0.0854	0.0061	0.0076
E 04	1877.	-----	-----	-----	-----	-----	-----
---	---	0.0042	0.0134	0.0096	0.0769	0.0056	0.0063
E 04	1766.	-----	-----	-----	-----	-----	-----
E 04	1431.	-----	-----	-----	-----	-----	-----
---	---	0.0043	0.0121	0.0076	0.0680	0.0049	0.0059
1.	1166.	-----	-----	-----	-----	-----	-----
1.	87.	-----	-----	-----	-----	-----	-----
8.	79.	-----	-----	-----	-----	-----	-----
4.	102.	-----	-----	-----	-----	-----	-----
6.	116.	-----	-----	-----	-----	-----	-----
1.	122.	-----	-----	-----	-----	-----	-----
7.	119.	-----	-----	-----	-----	-----	-----
5.	94.	-----	-----	-----	-----	-----	-----
5.	90.	-----	-----	-----	-----	-----	-----
2.	141.	-----	-----	-----	-----	-----	-----
2.	146.	-----	-----	-----	-----	-----	-----
7.	203.	-----	-----	-----	-----	-----	-----
1.	234.	-----	-----	-----	-----	-----	-----
1.	256.	-----	-----	-----	-----	-----	-----
5.	242.	-----	-----	-----	-----	-----	-----
1.	211.	-----	-----	-----	-----	-----	-----

AFF- 33
 JF-4 (PETROLEUM): 3-DAY DYNAMIC
 1980 SEP 3-5

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	C11 PPM SE-52C-2	TOLUENE PPM 10'C-600	TOLUENE PPM SE-52C-2	124TMEBZ RAW DATA SE-52C-2	M+P-XYL PPM 10'C-600	M+P-XYL PPM SE-52C-1	P BK6
1 620	-130	-----	0.0002	-----	-----	0.0000	-----	---
1 624	-126	-----	-----	-----	-----	-----	-----	---
1 640	-110	-----	-----	-----	-----	-----	-----	1
1 750	-40	-----	0.0293	-----	-----	0.0300	-----	1
1 751	-39	0.0189	-----	0.0507	4573.	-----	0.0074	---
1 755	-35	-----	-----	-----	-----	-----	-----	---
1 905	35	-----	-----	-----	-----	-----	-----	1
1 906	36	0.0195	-----	0.0466	4352.	-----	0.0071	---
1 1005	95	0.0169	-----	0.0399	3745.	-----	0.0060	1
1 1105	155	-----	-----	-----	-----	-----	-----	1
1 1106	156	0.0150	-----	0.0350	3279.	-----	0.0051	---
1 1200	210	-----	-----	-----	-----	-----	-----	---
1 1205	215	-----	-----	-----	-----	-----	-----	1
1 1207	217	0.0131	0.0206	0.0332	2535.	-----	0.0045	---
1 1304	274	0.0108	0.0175	0.0270	2054.	0.0145	0.0037	---
1 1305	275	-----	-----	-----	-----	-----	-----	1
1 1400	330	-----	-----	-----	-----	-----	-----	---
1 1404	334	0.0089	-----	0.0246	1428.	-----	0.0031	---
1 1405	335	-----	-----	-----	-----	-----	-----	1
1 1505	395	-----	-----	-----	-----	-----	-----	1
1 1507	397	-----	0.0140	-----	-----	0.0103	-----	---
1 1513	403	0.0033	-----	0.0219	1430.	-----	0.0027	---
1 1605	455	-----	-----	-----	-----	-----	-----	1
2 905	1475	-----	-----	-----	-----	-----	-----	1
2 906	1476	-----	-----	-----	-----	-----	-----	---
2 907	1477	-----	0.0120	-----	-----	0.0079	-----	---
2 915	1485	-----	-----	-----	-----	-----	-----	---
2 1005	1535	-----	-----	-----	-----	-----	-----	1
2 1105	1595	-----	-----	-----	-----	-----	-----	1
2 1201	1651	-----	-----	-----	-----	-----	-----	---
2 1205	1655	-----	-----	-----	-----	-----	-----	1
2 1206	1656	-----	0.0032	-----	-----	0.0060	-----	---
2 1305	1715	-----	-----	-----	-----	-----	-----	1
2 1405	1775	-----	-----	-----	-----	-----	-----	1
2 1505	1835	-----	0.0062	-----	-----	0.0033	-----	1
2 1506	1836	-----	-----	-----	-----	-----	-----	---
2 1605	1895	-----	-----	-----	-----	-----	-----	1
2 1607	1897	-----	-----	-----	-----	-----	-----	---
3 900	2910	-----	-----	-----	-----	-----	-----	---
3 905	2915	-----	-----	-----	-----	-----	-----	1
3 906	2916	-----	0.0059	-----	-----	0.0028	-----	---
3 1005	2975	-----	-----	-----	-----	-----	-----	1
3 1105	3035	-----	-----	-----	-----	-----	-----	1
3 1200	3090	-----	-----	-----	-----	-----	-----	---
3 1205	3095	-----	-----	-----	-----	-----	-----	1
3 1206	3096	-----	0.0041	-----	-----	0.0014	-----	---
3 1305	3155	-----	-----	-----	-----	-----	-----	1
3 1405	3215	-----	-----	-----	-----	-----	-----	1
3 1500	3270	-----	-----	-----	-----	-----	-----	---
3 1505	3275	-----	0.0027	-----	-----	0.0008	-----	---
3 1506	3276	-----	-----	-----	-----	-----	-----	1

----- NO DATA TAKEN

MEBZ DATA 2C-2	M+P-XYL PPM 10'C-600	M+P-XYL PPM SE-52C-1	CO PPM BK6800-2	PAN PPM ECD-1	HCHO PPM CA	PART.024 PART/CC TSI-023	PART.042 PART/CC TSI-023
---	0.0000	-----	-----	-----	-----	-----	-----
---	-----	-----	-----	0.000	-----	-----	-----
---	-----	-----	1.59	-----	-----	-167.	0.
---	0.0300	-----	1.64	-----	-----	0.	87.
3.	-----	0.0074	-----	0.000	-----	-----	-----
---	-----	-----	-----	-----	0.000	-----	-----
---	-----	-----	1.70	-----	-----	6.2E 04	696.
2.	-----	0.0071	-----	-----	-----	-----	-----
5.	-----	0.0060	1.72	-----	-----	3.0E 04	2.4E 04
---	-----	-----	1.75	-----	-----	3674.	4002.
9.	-----	0.0051	-----	-----	-----	-----	-----
---	-----	-----	-----	-----	0.027	-----	-----
---	-----	-----	1.72	-----	-----	1837.	2088.
5.	-----	0.0045	-----	0.000	-----	-----	-----
4.	0.0145	0.0037	-----	-----	-----	-----	-----
---	-----	-----	1.68	-----	-----	2004.	-435.
---	-----	-----	-----	-----	0.044	-----	-----
8.	-----	0.0031	-----	-----	-----	-----	-----
---	-----	-----	1.55	-----	-----	1002.	-435.
---	-----	-----	1.61	-----	-----	167.	174.
---	0.0103	-----	-----	0.000	-----	-----	-----
0.	-----	0.0027	-----	-----	-----	-----	-----
---	-----	-----	1.66	-----	-----	835.	0.
---	-----	-----	1.81	-----	-----	668.	348.
---	-----	-----	-----	0.000	-----	-----	-----
---	0.0079	-----	-----	-----	-----	-----	-----
---	-----	-----	-----	-----	0.084	-----	-----
---	-----	-----	1.87	-----	-----	167.	348.
---	-----	-----	1.92	-----	-----	167.	174.
---	-----	-----	-----	-----	0.061	-----	-----
---	-----	-----	1.89	-----	-----	0.	87.
---	0.0060	-----	-----	0.000	-----	-----	-----
---	-----	-----	1.89	-----	-----	-167.	87.
---	-----	-----	1.87	-----	-----	167.	261.
---	0.0033	-----	1.86	-----	-----	334.	87.
---	-----	-----	-----	0.000	-----	-----	-----
---	-----	-----	1.77	-----	-----	167.	174.
---	-----	-----	-----	-----	0.048	-----	-----
---	-----	-----	-----	-----	0.050	-----	-----
---	-----	-----	1.60	-----	-----	3006.	696.
---	0.0028	-----	-----	0.001	-----	-----	-----
---	-----	-----	1.94	-----	-----	1670.	435.
---	-----	-----	1.91	-----	-----	167.	783.
---	-----	-----	-----	-----	0.040	-----	-----
---	-----	-----	1.83	-----	-----	2672.	87.
---	0.0014	-----	-----	0.001	-----	-----	-----
---	-----	-----	1.87	-----	-----	1503.	522.
---	-----	-----	1.80	-----	-----	1169.	696.
---	-----	-----	-----	-----	0.038	-----	-----
---	0.0008	-----	-----	-----	-----	-----	-----
---	-----	-----	1.78	-----	-----	668.	522.

AFF- 33
 JP-4 (PETROLEUM): 3-DAY DYNAMIC
 1980 SEP 3-5

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	PART.075 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART.237 PART/CC TSI-023	PART.422 PART/CC TSI-023	PART.750 PART/CC TSI-023
-------------------------	--------------------------	--------------------------------	--------------------------------	--------------------------------	--------------------------------	--------------------------------

1 640	-110	89.	48.	0.	0.	0.
1 750	-40	44.	48.	12.	0.	0.
1 905	35	89.	72.	12.	7.	0.
1 1005	95	1.5E 04	1615.	135.	13.	0.
1 1105	155	2.8E 04	8676.	652.	67.	18.
1 1205	215	1.1E 04	1.8E 04	2140.	187.	32.
1 1305	275	3152.	1.6E 04	3690.	360.	42.
1 1405	335	1243.	1.1E 04	4243.	500.	70.
1 1505	395	266.	7134.	3678.	494.	60.
1 1605	455	133.	4675.	3087.	420.	70.

2 905	1475	533.	386.	160.	33.	4.
2 1005	1535	488.	458.	160.	27.	0.
2 1105	1595	266.	578.	221.	33.	4.
2 1205	1655	178.	506.	295.	47.	4.
2 1305	1715	178.	554.	258.	53.	7.
2 1405	1775	266.	434.	271.	40.	11.
2 1505	1835	178.	434.	209.	40.	4.
2 1605	1895	311.	386.	160.	27.	11.

3 905	2915	1998.	843.	185.	20.	4.
3 1005	2975	2042.	1133.	172.	20.	0.
3 1105	3035	1554.	1615.	246.	33.	11.
3 1205	3095	1376.	1904.	381.	33.	7.
3 1305	3155	1954.	2024.	381.	53.	4.
3 1405	3215	1865.	1856.	406.	40.	4.
3 1506	3276	1643.	1711.	480.	-13.	4.

----- NO DATA TAKEN

AFF- 34
 JF-4 (PETROLEUM): VARIABLE FUEL
 1980 SEP 9-10

DAY 1 (SEPTEMBER 9)

0722: BAG FILLED WITH PURE AIR.
 WET BULB= 8.5 C, DRY BULB= 18.8 C, R.H.= 23%
 0728: 5 ML NO2 INJECTED
 0730: 15 ML NO INJECTED
 0733: 200 ML FREON 12 ADDED
 0742: BAG DIVIDED
 0747-0802: 370 MICROLITERS JF-4 (PETROLEUM) INJECTED INTO SIDE 1
 0830-0845: 185 MICROLITERS JF-4 (PETROLEUM) INJECTED INTO SIDE 2
 0900: BAG UNCOVERED
 1600: BAG COVERED FOR NIGHT

DAY 2 (SEPTEMBER 10)

0700: SIDE A HAS ONLY ~5% OF VOLUME LEFT.
 DILUTION FACTOR, SIDE 1= 0.224
 DILUTION FACTOR, SIDE 2= 0.339
 0805-0817: SIDE 1 FILLED WITH PURE AIR
 0825: SIDE 2 FILLED WITH PURE AIR
 0930: BAG UNCOVERED

RESULTS	DAY 1	DAY 2
-----	-----	-----
AVG.T(DEG.C)	30(+4)	31(+4)
AVG.UV(MW/CM2)	2.1(+0.6)	2.3(+0.5)

T=0 AT 900 PST

BAG NO. 17 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	27.8	5.9	DEG C	SIDE 1
T	DORIC-1	28.7	5.9	DEG C	SIDE 2
UV RAD	EPFLEY-2	2.22	0.54	MW/CM2	

ID	INST.	INITIAL CONC.	UNITS	
NO	B-NOX-1	0.372	PPM	SIDE 1
NO	B-NOX-1	0.367	PPM	SIDE 2
NO2-UNC	B-NOX-1	0.149	PPM	SIDE 1
NO2-UNC	B-NOX-1	0.150	PPM	SIDE 2
THC	BK6800-2	36.00	PPMC	SIDE 1
THC	BK6800-2	20.60	PPMC	SIDE 2

AFF- 34
JP-4 (PETROLEUM): VARIABLE FUEL
1980 SEP 9-10

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
1600	BK6800-2	BECKMAN CO,HC ANALYZER SN:100016
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART, CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2750	SE-52C-2	RM-121; 30M SE-52 QUARTZ CAP, GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
2000	ECD-1	RM-121; 12' 5% CARBOWAX-400 GC; ECD
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG

AFF- 34
JP-4 (PETROLEUM): VARIABLE FUEL
1980 SEP 9-10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 OZONE PPM D-1790	SIDE 2 OZONE PPM D-1790	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1
1 705	-115	0.000	0.000	0.010	0.010	0.003	0.003	0.003	0.003
1 815	-45	0.007	-----	0.372	-----	0.149	-----	0.149	-----
1 855	-5	-----	0.004	-----	0.367	-----	0.150	-----	0.150
1 905	5	0.009	-----	0.352	-----	0.162	-----	0.162	-----
1 915	15	-----	0.009	-----	0.342	-----	0.171	-----	0.171
1 1005	65	0.016	-----	0.217	-----	0.269	-----	0.269	-----
1 1015	75	-----	0.006	-----	0.225	-----	0.260	-----	0.260
1 1105	125	0.048	-----	0.058	-----	0.413	-----	0.413	-----
1 1115	135	-----	0.023	-----	0.102	-----	0.371	-----	0.371
1 1205	185	0.181	-----	0.008	-----	0.412	-----	0.412	-----
1 1215	195	-----	0.074	-----	0.030	-----	0.428	-----	0.428
1 1305	245	0.368	-----	0.008	-----	0.357	-----	0.357	-----
1 1315	255	-----	0.175	-----	0.016	-----	0.411	-----	0.411
1 1405	305	0.523	-----	0.008	-----	0.290	-----	0.290	-----
1 1415	315	-----	0.268	-----	0.010	-----	0.380	-----	0.380
1 1505	365	0.602	-----	0.011	-----	0.228	-----	0.228	-----
1 1515	375	-----	0.326	-----	0.009	-----	0.347	-----	0.347
1 1605	425	0.585	-----	0.010	-----	0.168	-----	0.168	-----
1 1615	435	-----	0.295	-----	0.010	-----	0.243	-----	0.243
2 715	1335	0.298	-----	0.011	-----	0.067	-----	0.067	-----
2 725	1345	-----	0.059	-----	0.009	-----	0.080	-----	0.080
2 935	1475	0.061	-----	0.003	-----	0.024	-----	0.024	-----
2 945	1485	-----	0.033	-----	0.004	-----	0.033	-----	0.033
2 1035	1535	0.084	-----	0.002	-----	0.032	-----	0.032	-----
2 1045	1545	-----	0.080	-----	0.003	-----	0.035	-----	0.035
2 1130	1590	0.119	-----	0.004	-----	0.039	-----	0.039	-----
2 1145	1605	-----	0.125	-----	0.004	-----	0.036	-----	0.036
2 1235	1655	0.158	-----	0.004	-----	0.045	-----	0.045	-----
2 1245	1665	-----	0.162	-----	0.006	-----	0.037	-----	0.037
2 1335	1715	0.185	-----	0.006	-----	0.052	-----	0.052	-----
2 1345	1725	-----	0.185	-----	0.007	-----	0.037	-----	0.037
2 1435	1775	0.186	-----	0.008	-----	0.061	-----	0.061	-----
2 1445	1785	-----	0.199	-----	0.008	-----	0.038	-----	0.038

----- NO DATA TAKEN

SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BK6800-2	SIDE 2 THC PPMC BK6800-2
0.003	0.003	0.010	0.010	1.34	1.34
(.149	-----	0.518	-----	36.00	-----
-----	0.150	-----	0.514	-----	20.60
0.162	-----	0.514	-----	34.40	-----
-----	0.171	-----	0.510	-----	20.90
0.269	-----	0.490	-----	33.60	-----
-----	0.260	-----	0.486	-----	20.60
0.413	-----	0.472	-----	32.80	-----
-----	0.371	-----	0.491	-----	20.10
0.412	-----	0.414	-----	31.90	-----
-----	0.428	-----	0.456	-----	19.50
0.357	-----	0.358	-----	30.80	-----
-----	0.411	-----	0.419	-----	19.10
0.290	-----	0.293	-----	29.80	-----
-----	0.380	-----	0.383	-----	18.50
0.228	-----	0.232	-----	28.90	-----
-----	0.347	-----	0.350	-----	17.90
0.168	-----	0.173	-----	28.60	-----
-----	0.243	-----	0.250	-----	17.80
0.067	-----	0.063	-----	27.60	-----
-----	0.080	-----	0.086	-----	16.70
0.024	-----	0.027	-----	7.17	-----
-----	0.033	-----	0.037	-----	6.57
0.032	-----	0.034	-----	7.12	-----
-----	0.035	-----	0.038	-----	6.83
0.039	-----	0.041	-----	7.14	-----
-----	0.036	-----	0.039	-----	6.25
0.045	-----	0.049	-----	7.03	-----
-----	0.037	-----	0.040	-----	6.09
0.052	-----	0.058	-----	6.94	-----
-----	0.037	-----	0.041	-----	5.90
0.061	-----	0.066	-----	6.67	-----
-----	0.038	-----	0.042	-----	5.85

AFF- 34
 JP-4 (PETROLEUM): VARIABLE FUEL
 1980 SEP 9-10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-2	SIDE 1 FREON 12 RAW DATA DMS-1	SIDE 2 FREON 12 RAW DATA DMS-1	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143
1 704	-116	-----	-----	-----	-----	-----	-----	-----
1 705	-115	16.7	16.7	-----	-----	-----	0.3	(
1 810	-50	-----	-----	-----	248.8	-----	-----	---
1 815	-45	19.7	-----	-----	-----	-----	2.0	---
1 855	-5	-----	22.7	-----	-----	-----	-----	(
1 858	-2	-----	-----	-----	-----	230.4	-----	---
1 905	5	20.8	-----	2.13	-----	-----	20.0	---
1 915	15	-----	23.2	2.27	-----	-----	-----	74
1 1005	65	26.6	-----	2.43	-----	-----	53.0	---
1 1015	75	-----	28.6	2.68	-----	-----	-----	47
1 1105	125	29.6	-----	2.57	-----	-----	36.0	---
1 1115	135	-----	32.0	2.57	-----	-----	-----	32
1 1205	185	32.8	-----	2.54	-----	-----	23.0	---
1 1213	193	-----	-----	-----	-----	270.1	-----	---
1 1215	195	-----	33.6	2.54	-----	-----	-----	23
1 1304	244	-----	-----	-----	-----	-----	-----	---
1 1305	245	33.5	-----	2.24	-----	-----	21.6	---
1 1315	255	-----	34.1	2.16	-----	-----	-----	18
1 1405	305	32.5	-----	1.75	-----	-----	17.0	---
1 1415	315	-----	31.6	1.60	-----	-----	-----	14
1 1504	364	-----	-----	-----	267.3	-----	-----	---
1 1505	365	30.0	-----	1.08	-----	-----	12.8	---
1 1515	375	-----	29.8	1.00	-----	-----	-----	10
1 1554	414	-----	-----	-----	-----	268.8	-----	---
1 1605	425	27.5	-----	-----	-----	-----	9.7	---
1 1615	435	-----	26.6	-----	-----	-----	-----	---
2 715	1335	18.7	-----	-----	-----	-----	0.0	---
2 725	1345	-----	18.7	-----	-----	-----	-----	(
2 736	1356	-----	-----	-----	-----	5.760 B	-----	---
2 750	1370	-----	-----	-----	5.640	-----	-----	---
2 812	1392	-----	-----	-----	1.264	-----	-----	---
2 906	1446	-----	-----	-----	-----	1.952	-----	---
2 933	1473	-----	-----	-----	1.280	-----	-----	---
2 935	1475	22.5	-----	2.73	-----	-----	0.0	---
2 945	1485	-----	23.5	2.79	-----	-----	-----	8
2 1035	1535	29.5	-----	2.79	-----	-----	2.1	---
2 1044	1544	-----	-----	-----	-----	87.94 C	-----	---
2 1045	1545	-----	29.7	2.84	-----	-----	-----	17
2 1130	1590	31.3	-----	2.57	-----	-----	3.1	---
2 1134	1594	-----	-----	-----	45.95	-----	-----	(
2 1145	1605	-----	34.2	2.65	-----	-----	-----	---
2 1235	1655	33.3	-----	2.50	-----	-----	2.5	---
2 1245	1665	-----	34.5	2.43	-----	-----	-----	(
2 1333	1713	-----	-----	-----	55.42	-----	-----	---
2 1335	1715	34.0	-----	2.09	-----	-----	2.6	---
2 1345	1725	-----	35.5	1.98	-----	-----	-----	!
2 1435	1775	34.2	-----	1.41	-----	-----	2.2	---
2 1444	1784	-----	-----	-----	-----	89.47	-----	---
2 1445	1785	-----	33.5	1.35	-----	-----	-----	---

----- NO DATA TAKEN

SIDE 2 FREON 12 RAW DATA DMS-1	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET
-----	-----	-----	-----	-----	-----	-----
-----	0.3	0.3	2.	2.	0.	0.
-----	-----	-----	-----	-----	-----	-----
-----	2.0	-----	2.	-----	0.	-----
-----	-----	0.3	-----	2.	-----	0.
230.4	-----	-----	-----	-----	-----	-----
-----	20.0	-----	2.	-----	0.	-----
-----	-----	74.0	-----	2.	-----	0.
-----	53.0	-----	2.	-----	0.	-----
-----	-----	47.0	-----	2.	-----	0.
-----	36.0	-----	3.	-----	0.	-----
-----	-----	32.0	-----	3.	-----	0.
-----	23.0	-----	3.	-----	0.	-----
270.1	-----	-----	-----	-----	-----	-----
-----	-----	23.0	-----	3.	-----	0.
-----	-----	-----	-----	-----	-----	-----
-----	21.6	-----	4.	-----	0.	-----
-----	-----	18.6	-----	3.	-----	0.
-----	17.0	-----	11.	-----	0.	-----
-----	-----	14.0	-----	4.	-----	0.
-----	-----	-----	-----	-----	-----	-----
-----	12.8	-----	138.	-----	3.	-----
-----	-----	10.2	-----	4.	-----	0.
268.8	-----	-----	-----	-----	-----	-----
-----	9.7	-----	211.	-----	12.	-----
-----	-----	7.7	-----	6.	-----	0.
-----	-----	-----	-----	-----	-----	-----
-----	0.0	-----	14.	-----	1.	-----
-----	-----	0.0	-----	15.	-----	1.
5.760 B	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----
1.952	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----
-----	0.0	-----	4.	-----	0.	-----
-----	-----	8.3	-----	13.	-----	1.
-----	2.1	-----	5.	-----	0.	-----
87.94 C	-----	-----	-----	-----	-----	-----
-----	-----	12.0	-----	19.	-----	1.
-----	3.1	-----	7.	-----	0.	-----
-----	-----	-----	-----	-----	-----	-----
-----	-----	9.2	-----	20.	-----	1.
-----	2.5	-----	7.	-----	1.	-----
-----	-----	6.8	-----	19.	-----	1.
-----	-----	-----	-----	-----	-----	-----
-----	2.6	-----	8.	-----	1.	-----
-----	-----	5.6	-----	17.	-----	1.
-----	2.2	-----	11.	-----	1.	-----
89.47	-----	-----	-----	-----	-----	-----
-----	-----	3.9	-----	15.	-----	1.

2

AFF- 34
JP-4 (PETROLEUM); VARIABLE FUEL
1980 SEP 9-10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET	SIDE 1 BSCAT 10-4 M-1 MRI-388	SIDE 2 BSCAT 10-4 M-1 MRI-388	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UM3/CC TSI-023	SIDE AER PART TSI-
1 705	-115	0.	0.	0.4	0.4	-0.	-0.	548
1 815	-45	0.	-----	0.4	-----	0.	-----	222
1 855	-5	-----	0.	-----	0.5	-----	0.	-----
1 905	5	0.	-----	0.5	-----	1.	-----	165
1 915	15	-----	0.	-----	0.5	-----	-0.	-----
1 1005	65	0.	-----	0.5	-----	9.	-----	1.18
1 1015	75	-----	0.	-----	0.5	-----	7.	-----
1 1105	125	0.	-----	1.0	-----	34.	-----	6.58
1 1115	135	-----	0.	-----	1.2	-----	19.	-----
1 1205	185	0.	-----	1.6	-----	64.	-----	5.18
1 1215	195	-----	0.	-----	1.0	-----	29.	-----
1 1305	245	0.	-----	3.1	-----	99.	-----	4.18
1 1315	255	-----	0.	-----	1.3	-----	40.	-----
1 1405	305	0.	-----	5.8	-----	139.	-----	3.08
1 1415	315	-----	0.	-----	1.9	-----	54.	-----
1 1505	365	0.	-----	9.0	-----	180.	-----	2.38
1 1515	375	-----	0.	-----	2.3	-----	57.	-----
1 1605	425	0.	-----	9.8	-----	143.	-----	1.88
1 1615	435	-----	0.	-----	2.8	-----	63.	-----
2 715	1335	0.	-----	0.8	-----	2.	-----	502
2 725	1345	-----	0.	-----	1.0	-----	7.	-----
2 935	1475	0.	-----	0.6	-----	4.	-----	319
2 945	1485	-----	0.	-----	0.6	-----	2.	-----
2 1035	1535	0.	-----	0.7	-----	2.	-----	394
2 1045	1545	-----	0.	-----	0.9	-----	15.	-----
2 1130	1590	0.	-----	0.9	-----	11.	-----	682
2 1145	1605	-----	0.	-----	1.1	-----	23.	-----
2 1235	1655	0.	-----	1.4	-----	18.	-----	668
2 1245	1665	-----	0.	-----	1.3	-----	19.	-----
2 1335	1715	0.	-----	1.8	-----	22.	-----	460
2 1345	1725	-----	0.	-----	1.3	-----	21.	-----
2 1435	1775	0.	-----	1.8	-----	25.	-----	452
2 1445	1785	-----	0.	-----	1.4	-----	20.	-----

----- NO DATA TAKEN

	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UM3/CC TSI-023	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023
.4	-0.	-0.	548.	548.	4.	4.
---	0.	---	222.	---	7.	---
.5	---	0.	---	613.	---	12.
---	1.	---	1651.	---	14.	---
.5	---	-0.	---	2394.	---	9.
---	9.	---	1.1E 05	---	660.	---
.5	---	7.	---	9.6E 04	---	526.
---	34.	---	6.5E 04	---	1424.	---
.2	---	19.	---	6.0E 04	---	922.
---	64.	---	5.1E 04	---	2195.	---
.0	---	29.	---	4.4E 04	---	1207.
---	99.	---	4.1E 04	---	2760.	---
.3	---	40.	---	3.7E 04	---	1416.
---	139.	---	3.0E 04	---	3136.	---
.9	---	54.	---	2.2E 04	---	1569.
---	180.	---	2.3E 04	---	3171.	---
.3	---	57.	---	1.9E 04	---	1460.
---	143.	---	1.8E 04	---	2613.	---
.8	---	63.	---	1.3E 04	---	1388.
---	2.	---	5020.	---	73.	---
.0	---	7.	---	3256.	---	138.
---	4.	---	3196.	---	79.	---
.8	---	2.	---	1.3E 04	---	92.
---	2.	---	3944.	---	60.	---
.9	---	15.	---	2.0E 04	---	540.
---	11.	---	6822.	---	320.	---
.1	---	23.	---	1.6E 04	---	746.
---	18.	---	6684.	---	465.	---
.3	---	19.	---	1.3E 04	---	679.
---	22.	---	4600.	---	480.	---
.3	---	21.	---	9041.	---	612.
---	25.	---	4520.	---	449.	---
.4	---	20.	---	6829.	---	519.

AFF- 34
JP-4 (PETROLEUM): VARIABLE FUEL
1980 SEP 9-10

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1 N-C4 PPM DMS-1	SIDE 2 N-C4 PPM DMS-1	SIDE 1 C5-ISOMS PPM SE-52C-2	SIDE 2 C5-ISOMS PPM SE-52C-2	SIDE 1 I-C5 PPM DMS-1	SIDE 2 I-C5 PPM DMS-1	SIDE 1 N-C5 PPM DMS-1	SIDE N-C PPM DMS-
1 703	-117	-----	-----	0.0114	0.0114	-----	-----	-----	-----
1 704	-116	0.0022	0.0022	-----	-----	0.0002	0.0002	-----	-----
1 810	-50	0.0122	-----	-----	-----	0.0566	-----	0.0612	-----
1 813	-47	-----	-----	0.0054	-----	-----	-----	-----	-----
1 858	-2	-----	0.0071	-----	0.0106	-----	0.0323	-----	0.03
1 1003	63	-----	-----	0.0089	-----	-----	-----	-----	-----
1 1103	123	-----	-----	0.0062	-----	-----	-----	-----	-----
1 1213	193	-----	0.0079	-----	-----	-----	0.0308	-----	0.03
1 1304	244	-----	-----	-----	-----	-----	-----	-----	-----
1 1414	314	-----	-----	-----	-----	-----	-----	-----	-----
1 1504	364	0.0124	-----	0.0080	-----	0.0545	-----	0.0585	-----
1 1554	414	-----	0.0077	-----	0.0060	-----	0.0302	-----	0.03
2 712	1332	-----	-----	0.0093	-----	-----	-----	-----	-----
2 736	1356	-----	-----	-----	-----	-----	-----	-----	-----
2 750	1370	-----	-----	-----	-----	-----	-----	-----	-----
2 812	1392	-----	-----	-----	-----	-----	-----	-----	-----
2 815	1395	-----	-----	-----	0.0049	-----	-----	-----	-----
2 906	1446	-----	-----	-----	-----	-----	-----	-----	-----
2 933	1473	-----	-----	0.0020	-----	-----	-----	-----	-----
2 1044	1544	-----	0.0041	-----	-----	-----	0.0102	-----	0.01
2 1134	1594	0.0039	-----	0.0021	-----	0.0105 A	-----	0.0120 A	-----
2 1244	1664	-----	-----	-----	0.0017	-----	-----	-----	-----
2 1333	1713	0.0044	-----	-----	-----	0.0107	-----	0.0106 A	-----
2 1334	1714	-----	-----	0.0020	-----	-----	-----	-----	-----
2 1444	1784	-----	0.0044	-----	0.0018	-----	0.0095	-----	0.01

----- NO DATA TAKEN

AFF- 34
 JP-4 (PETROLEUM): VARIABLE FUEL
 1980 SEP 9-10

CLOCK TIME	ELAPSED TIME	SIDE 1 N-C6 PPM	SIDE 1 N-C6 PPM	SIDE 2 N-C6 PPM	SIDE 2 N-C6 PPM	SIDE 1 N-C7 PPM	SIDE 2 N-C7 PPM	SIDE N- PPM
BY HR.	(MIN)	SE-52C-2	DMS-1	SE-52C-2	DMS-1	SE-52C-2	SE-52C-2	SE-5
1 703	-117	-----	-----	-----	-----	-----	-----	---
1 704	-116	-----	-----	-----	-----	-----	-----	---
1 810	-50	-----	-----	-----	-----	-----	-----	---
1 813	-47	0.0362	-----	-----	-----	0.0263	-----	0.2
1 858	-2	-----	-----	0.0176	0.0631	-----	0.0128	---
1 1003	63	0.0339	-----	-----	-----	0.0246	-----	0.2
1 1103	123	0.0293	-----	-----	-----	0.0217	-----	0.1
1 1213	193	-----	-----	0.0190	0.0545 A	-----	0.0134	---
1 1304	244	-----	-----	-----	-----	-----	-----	---
1 1414	314	-----	-----	-----	-----	-----	-----	---
1 1504	364	0.0309	0.0962	-----	-----	0.0215	-----	0.1
1 1554	414	-----	-----	0.0181	0.0567	-----	0.0128	---
2 712	1332	0.0298	-----	-----	-----	0.0198	-----	0.1
2 736	1356	-----	-----	-----	-----	-----	-----	---
2 750	1370	-----	-----	-----	-----	-----	-----	---
2 812	1392	-----	-----	-----	-----	-----	-----	---
2 815	1395	-----	-----	0.0155	-----	-----	0.0112	---
2 906	1446	-----	-----	-----	-----	-----	-----	---
2 933	1473	0.0069	-----	-----	-----	0.0049	-----	0.0
2 1044	1544	-----	-----	-----	0.0186	-----	-----	---
2 1134	1594	0.0067	0.0198	-----	-----	0.0048	-----	0.0
2 1244	1664	-----	-----	0.0059	-----	-----	0.0039	---
2 1333	1713	-----	0.0179	-----	-----	-----	-----	---
2 1334	1714	0.0062	-----	-----	-----	0.0045	-----	0.0
2 1444	1784	-----	-----	0.0057	0.0172	-----	0.0037	---

----- NO DATA TAKEN

	SIDE 1 N-C7 PPM SE-52C-2	SIDE 2 N-C7 PPM SE-52C-2	SIDE 1 N-C8 PPM SE-52C-2	SIDE 2 N-C8 PPM SE-52C-2	SIDE 1 N-C9 PPM SE-52C-2	SIDE 2 N-C9 PPM SE-52C-2
2	-----	-----	-----	-----	0.0003	0.0003
	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----
	0.0263	-----	0.2218	-----	0.0161	-----
1	-----	0.0128	-----	0.1074	-----	0.0078
	0.0246	-----	0.2048	-----	0.0147	-----
	0.0217	-----	0.1833	-----	0.0135	-----
5 A	-----	0.0134	-----	0.1084	-----	0.0077
	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----
	0.0215	-----	0.1752	-----	0.0127	-----
7	-----	0.0128	-----	0.1008	-----	0.0073
	-----	-----	-----	-----	-----	-----
	0.0198	-----	0.1576	-----	0.0112	-----
	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----
	-----	0.0112	-----	0.0898	-----	0.0065
	-----	-----	-----	-----	-----	-----
	0.0049	-----	0.0395	-----	0.0029	-----
6	-----	-----	-----	-----	-----	-----
	0.0048	-----	0.0392	-----	0.0029	-----
	-----	0.0039	-----	0.0298	-----	-----
	-----	-----	-----	-----	-----	-----
	0.0045	-----	0.0357	-----	0.0027	-----
72	-----	0.0037	-----	0.0284	-----	0.0020

AFF- 34
 JP-4 (PETROLEUM): VARIABLE FUEL
 1980 SEP 9-10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 C10 PPM SE-52C-2	SIDE 2 C10 PPM SE-52C-2	SIDE 1 C11 PPM SE-52C-2	SIDE 2 C11 PPM SE-52C-2	SIDE 1 TOLUENE PPM SE-52C-2	SIDE 1 TOLUENE PPM 10'C-600
1 703	-117	-----	-----	0.0006	0.0006	0.0002	-----
1 704	-116	-----	-----	-----	-----	-----	0.0002
1 810	-50	-----	-----	-----	-----	-----	0.0289
1 813	-47	0.0195	-----	0.0284	-----	0.0686	-----
1 858	-2	-----	0.0096	-----	0.0131	-----	-----
1 1003	63	0.0180	-----	0.0243	-----	0.0637	-----
1 1103	123	0.0170	-----	0.0250	-----	0.0570	-----
1 1213	193	-----	0.0092	-----	0.0127	-----	-----
1 1304	244	-----	-----	-----	-----	-----	-----
1 1414	314	-----	-----	-----	-----	-----	-----
1 1504	364	0.0150	-----	0.0212	-----	0.0555	0.0337
1 1554	414	-----	0.0082	-----	0.0121	-----	-----
2 712	1332	0.0131	-----	0.0166	-----	0.0508	-----
2 815	1395	-----	0.0072	-----	0.0097	-----	-----
2 933	1473	0.0034	-----	0.0053	-----	0.0126	-----
2 1044	1544	-----	-----	-----	-----	-----	-----
2 1134	1594	0.0035	-----	0.0048	-----	0.0121	0.0068
2 1244	1664	-----	0.0024	-----	0.0033	-----	-----
2 1333	1713	-----	-----	-----	-----	-----	0.0068
2 1334	1714	0.0034	-----	0.0053	-----	0.0114	-----
2 1444	1784	-----	0.0023	-----	0.0032	-----	-----

----- NO DATA TAKEN

SIDE 1 TOLUENE PPM SE-52C-2	SIDE 1 TOLUENE PPM 10'C-600	SIDE 2 TOLUENE PPM SE-52C-2	SIDE 2 TOLUENE PPM 10'C-600	SIDE 1 124TMEBZ RAW DATA SE-52C-2	SIDE 2 124TMEBZ RAW DATA SE-52C-2
0.0002	-----	0.0009	-----	-----	-----
-----	0.0002	-----	0.0002	-----	-----
-----	0.0289	-----	-----	-----	-----
0.0686	-----	-----	-----	6531.	-----
-----	-----	0.1309	0.0195	-----	3365.
0.0637	-----	-----	-----	5911.	-----
0.0570	-----	-----	-----	5563.	-----
-----	-----	0.1336	0.0191	-----	3071.
-----	-----	-----	-----	-----	-----
0.0555	0.0337	-----	-----	3943.	-----
-----	-----	0.1272	0.0175	-----	1990.
-----	-----	-----	-----	-----	-----
0.0508	-----	-----	-----	3565.	-----
-----	-----	0.1105	-----	-----	1920.
0.0126	-----	-----	-----	865.0	-----
-----	-----	-----	0.0061	-----	-----
0.0121	0.0068	-----	-----	859.0	-----
-----	-----	0.0378	-----	-----	369.0
-----	0.0068	-----	-----	-----	-----
0.0114	-----	-----	-----	745.0	-----
-----	-----	0.0364	0.0088	-----	500.0

2

AFF- 34
 JF-4 (PETROLEUM): VARIABLE FUEL
 1980 SEP 9-10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 M+P-XYL PPM SE-52C-2	SIDE 1 M+P-XYL PPM 10'C-600	SIDE 2 M+P-XYL PPM SE-52C-2	SIDE 2 M+P-XYL PPM 10'C-600	SIDE 1 CO PPM BK6800-1	SIDE 2 CU PPM BK6800-1	SID P PI EC
1 703	-117	-----	-----	-----	-----	-----	-----	0
1 704	-116	-----	0.0001	-----	0.0001	-----	-----	---
1 705	-115	-----	-----	-----	-----	1.91	1.91	---
1 810	-50	-----	0.0377	-----	-----	-----	-----	---
1 813	-47	0.0208	-----	-----	-----	-----	-----	0
1 815	-45	-----	-----	-----	-----	1.83	-----	---
1 830	-30	-----	-----	-----	-----	-----	-----	---
1 855	-5	-----	-----	-----	-----	-----	1.80	---
1 858	-2	-----	-----	0.0103	0.0199	-----	-----	---
1 900	0	-----	-----	-----	-----	-----	-----	---
1 905	5	-----	-----	-----	-----	1.88	-----	---
1 915	15	-----	-----	-----	-----	-----	1.90	---
1 1003	63	0.0189	-----	-----	-----	-----	-----	---
1 1005	65	-----	-----	-----	-----	1.90	-----	---
1 1015	75	-----	-----	-----	-----	-----	1.88	---
1 1103	123	0.0167	-----	-----	-----	-----	-----	---
1 1105	125	-----	-----	-----	-----	1.86	-----	---
1 1115	135	-----	-----	-----	-----	-----	1.91	---
1 1150	170	-----	-----	-----	-----	-----	-----	---
1 1205	185	-----	-----	-----	-----	1.90	-----	---
1 1213	193	-----	-----	0.0118	0.0172	-----	-----	---
1 1215	195	-----	-----	-----	-----	-----	1.94	---
1 1304	244	-----	-----	-----	-----	-----	-----	---
1 1305	245	-----	-----	-----	-----	1.87	-----	---
1 1315	255	-----	-----	-----	-----	-----	1.91	---
1 1405	305	-----	-----	-----	-----	1.97	-----	---
1 1414	314	-----	-----	-----	-----	-----	-----	---
1 1415	315	-----	-----	-----	-----	-----	1.99	---
1 1504	364	0.0148	0.0266	-----	-----	-----	-----	0
1 1505	365	-----	-----	-----	-----	1.99	-----	---
1 1515	375	-----	-----	-----	-----	-----	1.97	---
1 1540	400	-----	-----	-----	-----	-----	-----	---
1 1554	414	-----	-----	0.0084	0.0145	-----	-----	---
1 1601	421	-----	-----	-----	-----	-----	-----	---
1 1605	425	-----	-----	-----	-----	2.02	-----	---
1 1615	435	-----	-----	-----	-----	-----	1.98	---
2 712	1332	0.0131	-----	-----	-----	-----	-----	---
2 715	1335	-----	-----	-----	-----	2.02	-----	---
2 725	1345	-----	-----	-----	-----	-----	1.87	---
2 815	1395	-----	-----	0.0074	-----	-----	-----	---
2 933	1473	0.0032	-----	-----	-----	-----	-----	0
2 935	1475	-----	-----	-----	-----	1.38	-----	---
2 941	1481	-----	-----	-----	-----	-----	-----	---
2 945	1485	-----	-----	-----	-----	-----	1.47	---
2 1004	1504	-----	-----	-----	-----	-----	-----	---
2 1035	1535	-----	-----	-----	-----	1.41	-----	---
2 1044	1544	-----	-----	-----	-----	-----	-----	---
2 1045	1545	-----	-----	-----	-----	-----	1.47	---
2 1130	1590	-----	-----	-----	-----	1.35	-----	---
2 1134	1594	0.0029	0.0047	-----	-----	-----	-----	0
2 1145	1605	-----	-----	-----	-----	-----	1.52	---

----- NO DATA TAKEN

2 L	SIDE 1 CO PPM BK6800-1	SIDE 2 CO PPM BK6800-1	SIDE 1 PAN PPM ECD-1	SIDE 2 PAN PPM ECD-1	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA
-	-----	-----	0.000	0.000	-----	-----
1	-----	-----	-----	-----	-----	-----
	1.91	1.91	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----
	-----	-----	0.000	-----	-----	-----
	1.83	-----	-----	-----	-----	-----
	-----	-----	-----	-----	0.019	-----
	-----	1.80	-----	-----	-----	-----
9	-----	-----	-----	0.000	-----	-----
	-----	-----	-----	-----	-----	0.019
	1.88	-----	-----	-----	-----	-----
	-----	1.90	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----
	1.90	-----	-----	-----	-----	-----
	-----	1.88	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----
	1.86	-----	-----	-----	-----	-----
	-----	1.91	-----	-----	-----	-----
	-----	-----	-----	-----	-----	0.054
	1.90	-----	-----	-----	-----	-----
2	-----	-----	-----	0.000	-----	-----
	-----	1.94	-----	-----	0.054	-----
	-----	-----	-----	-----	-----	-----
	1.87	-----	-----	-----	-----	-----
	-----	1.91	-----	-----	-----	-----
	1.97	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----
	-----	1.99	-----	-----	-----	-----
	-----	-----	0.006	-----	-----	-----
	1.99	-----	-----	-----	-----	-----
	-----	1.97	-----	-----	-----	-----
	-----	-----	-----	-----	0.075	-----
	-----	-----	-----	0.003	-----	-----
	2.02	-----	-----	-----	-----	0.075
	-----	1.98	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----
	2.02	-----	-----	-----	-----	-----
	-----	1.87	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----
	-----	-----	0.001	-----	-----	-----
	1.38	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	0.040
	-----	1.47	-----	-----	-----	-----
	-----	-----	-----	-----	0.040	-----
	1.41	-----	-----	-----	-----	-----
	-----	-----	-----	0.001	-----	-----
	-----	1.47	-----	-----	-----	-----
	1.35	-----	-----	-----	-----	-----
	-----	-----	0.001	-----	-----	-----
	-----	1.52	-----	-----	-----	-----

AFF- 34

JP-4 (PETROLEUM): VARIABLE FUEL

1980 SEP 9-10

CLOCK	ELAPSED	SIDE 1	SIDE 1	SIDE 2	SIDE 2	SIDE 1	SIDE 2	SIDE
TIME	TIME	M+P-XYL	M+P-XYL	M+P-XYL	M+P-XYL	CO	CO	PAI
DY HR.	(MIN)	PPM	PPM	PPM	PPM	PPM	PPM	PPM
		SE-52C-2	10'C-600	SE-52C-2	10'C-600	BK6800-1	BK6800-1	ECD
2 1151	1611	-----	-----	-----	-----	-----	-----	-----
2 1213	1633	-----	-----	-----	-----	-----	-----	-----
2 1235	1655	-----	-----	-----	-----	1.46	-----	-----
2 1244	1664	-----	-----	0.0022	-----	-----	-----	-----
2 1245	1665	-----	-----	-----	-----	-----	1.48	-----
2 1333	1713	-----	0.0042	-----	-----	-----	-----	0.0
2 1334	1714	0.0027	-----	-----	-----	-----	-----	-----
2 1335	1715	-----	-----	-----	-----	1.47	-----	-----
2 1345	1725	-----	-----	-----	-----	-----	1.59	-----
2 1420	1760	-----	-----	-----	-----	-----	-----	-----
2 1435	1775	-----	-----	-----	-----	1.54	-----	-----
2 1442	1782	-----	-----	-----	-----	-----	-----	-----
2 1444	1784	-----	-----	0.0019	0.0067	-----	-----	-----
2 1445	1785	-----	-----	-----	-----	-----	1.55	-----

----- NO DATA TAKEN

SIDE 1 CO PPM BK6800-1	SIDE 2 CO PPM BK6800-1	SIDE 1 PAN PPM ECD-1	SIDE 2 PAN PPM ECD-1	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA
-----	-----	-----	-----	0.042	-----
-----	-----	-----	-----	-----	0.042
1.46	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	1.48	-----	-----	-----	-----
-----	-----	0.001	-----	-----	-----
-----	-----	-----	-----	-----	-----
1.47	-----	-----	-----	-----	-----
-----	1.59	-----	-----	-----	-----
-----	-----	-----	-----	-----	0.067
1.54	-----	-----	-----	-----	-----
-----	-----	-----	-----	0.067	-----
-----	-----	-----	0.006	-----	-----
-----	1.55	-----	-----	-----	-----

AFF- 34
JP-4 (PETROLEUM): VARIABLE FUEL
1980 SEP 9-10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023	SIDE 1 PART.042 PART/CC TSI-023	SIDE 2 PART.042 PART/CC TSI-023	SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023	SIDE PART. PART/CC TSI-023
1 705	-115	167.	167.	174.	174.	178.	178.	24
1 815	-45	167.	-----	0.	-----	0.	-----	48
1 855	-5	-----	334.	-----	87.	-----	89.	-----
1 905	5	1336.	-----	174.	-----	89.	-----	48
1 915	15	-----	2171.	-----	0.	-----	178.	-----
1 1005	65	6.2E 04	-----	3.0E 04	-----	1.5E 04	-----	149
1 1015	75	-----	5.9E 04	-----	2.5E 04	-----	1.2E 04	-----
1 1105	125	4175.	-----	1.5E 04	-----	3.6E 04	-----	865
1 1115	135	-----	1.0E 04	-----	1.9E 04	-----	2.6E 04	-----
1 1205	185	1670.	-----	870.	-----	2.5E 04	-----	2.1
1 1215	195	-----	4676.	-----	3306.	-----	2.6E 04	-----
1 1305	245	1670.	-----	870.	-----	8258.	-----	2.5
1 1315	255	-----	501.	-----	8265.	-----	1.3E 04	-----
1 1405	305	0.	-----	0.	-----	2264.	-----	2.0
1 1415	315	-----	-1169.	-----	-1566.	-----	6793.	-----
1 1505	365	835.	-----	0.	-----	44.	-----	1.3
1 1515	375	-----	1169.	-----	87.	-----	2664.	-----
1 1605	425	1169.	-----	261.	-----	666.	-----	776
1 1615	435	-----	-167.	-----	783.	-----	133.	-----
2 715	1335	2672.	-----	957.	-----	888.	-----	36
2 725	1345	-----	167.	-----	1479.	-----	844.	-----
2 935	1475	1503.	-----	522.	-----	666.	-----	36
2 945	1485	-----	4843.	-----	873.	-----	844.	-----
2 1035	1535	1670.	-----	783.	-----	1154.	-----	28
2 1045	1545	-----	2338.	-----	1131.	-----	1.3E 04	-----
2 1130	1590	334.	-----	696.	-----	2575.	-----	272
2 1145	1605	-----	167.	-----	174.	-----	9368.	-----
2 1235	1655	1336.	-----	0.	-----	799.	-----	344
2 1245	1665	-----	0.	-----	696.	-----	4706.	-----
2 1335	1715	167.	-----	348.	-----	178.	-----	253
2 1345	1725	-----	-835.	-----	435.	-----	1909.	-----
2 1435	1775	1002.	-----	0.	-----	488.	-----	180
2 1445	1785	-----	334.	-----	0.	-----	888.	-----

----- NO DATA TAKEN

SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
RT.075	PART.133	PART.133	PART.237	PART.237
RT/CC	PART/CC	PART/CC	PART/CC	PART/CC
I-023	TSI-023	TSI-023	TSI-023	TSI-023
178.	24.	24.	12.	12.
---	48.	---	0.	---
89.	---	96.	---	0.
---	48.	---	0.	---
178.	---	48.	---	-12.
---	1494.	---	135.	---
.2E 04	---	1109.	---	25.
---	8652.	---	640.	---
.6E 04	---	4121.	---	283.
---	2.1E 04	---	2189.	---
.6E 04	---	9351.	---	689.
---	2.5E 04	---	4723.	---
.3E 04	---	1.4E 04	---	1414.
---	2.0E 04	---	7245.	---
793.	---	1.5E 04	---	2448.
---	1.3E 04	---	7638.	---
664.	---	1.2E 04	---	2829.
---	7760.	---	6826.	---
133.	---	8893.	---	3087.
---	362.	---	135.	---
844.	---	506.	---	209.
---	362.	---	123.	---
844.	---	289.	---	37.
---	289.	---	37.	---
.3E 04	---	3302.	---	332.
---	2723.	---	443.	---
368.	---	5206.	---	1304.
---	3446.	---	972.	---
706.	---	7061.	---	861.
---	2530.	---	1193.	---
909.	---	6772.	---	652.
---	1808.	---	1033.	---
888.	---	4531.	---	972.

AFF- 34
JP-4 (PETROLEUM): VARIABLE FUEL
1980 SEP 9-10

CLOCK	ELAPSED	SIDE 1	SIDE 2	SIDE 1	SIDE 2
TIME	TIME	PART.422	PART.422	PART.750	PART.750
BY HR.	(MIN)	PART/CC	PART/CC	PART/CC	PART/CC
		TSI-023	TSI-023	TSI-023	TSI-023
1 705	-115	-7.	-7.	0.	0.
1 815	-45	7.	-----	0.	-----
1 855	-5	-----	7.	-----	0.
1 905	5	0.	-----	4.	-----
1 915	15	-----	13.	-----	-4.
1 1005	65	7.	-----	4.	-----
1 1015	75	-----	27.	-----	0.
1 1105	125	53.	-----	39.	-----
1 1115	135	-----	33.	-----	18.
1 1205	185	220.	-----	39.	-----
1 1215	195	-----	73.	-----	18.
1 1305	245	447.	-----	70.	-----
1 1315	255	-----	120.	-----	25.
1 1405	305	860.	-----	137.	-----
1 1415	315	-----	227.	-----	39.
1 1505	365	840.	-----	351.	-----
1 1515	375	-----	287.	-----	49.
1 1605	425	1147.	-----	183.	-----
1 1615	435	-----	394.	-----	70.
2 715	1335	7.	-----	0.	-----
2 725	1345	-----	33.	-----	18.
2 935	1475	13.	-----	7.	-----
2 945	1485	-----	13.	-----	0.
2 1035	1535	7.	-----	4.	-----
2 1045	1545	-----	60.	-----	18.
2 1130	1590	40.	-----	11.	-----
2 1145	1605	-----	73.	-----	11.
2 1235	1655	120.	-----	11.	-----
2 1245	1665	-----	73.	-----	4.
2 1335	1715	167.	-----	18.	-----
2 1345	1725	-----	87.	-----	21.
2 1435	1775	147.	-----	42.	-----
2 1445	1785	-----	87.	-----	18.

----- NO DATA TAKEN

NOTES

- A BASELINE SUBJECTIVE BECAUSE OF NEARBY INTERFERING PEAKS
- B FREON 12 SAMPLES, UP TO THIS TIME WERE RUN ON A TRAP. NOW ALL
FREON 12 SAMPLES ARE MONITORED WITH LOOP
- C THE REST OF THE FREON SAMPLES ARE MEASURED BY TRAP AGAIN.

AFF- 35
NOX- AIR IRRADIATION
1980 SEP 11

0840: BAG FILLED WITH PURE AIR AT ~25% R.H.
0902: 6 ML NO2 INJECTED
0904: 18 ML NO INJECTED
0906: 0.8 ML PROPANE ADDED
0908: 0.8 ML PROPENE ADDED
1000: BAG UNCOVERED
NO OZONE FORMATION OCCURED

RESULTS:

CALC. AVG. OH = $30.8 * \ln(\text{PROPANE}/\text{PROPENE})/\text{DT} = 0.047 \text{ PPT}$
CALC. RAD. INPUT = $16.0 * (\text{AVG.OH}) * (60 + \text{MIN.AVG.NO2}) = 0.11 \text{ PPB/MIN}$
-D (NO)/DT = 0.13 PPB/MIN
AVG. K1 ESTIMATED FROM RADION. DATA = $0.363 (+0.009)/\text{MIN}$

T=0 AT 1000 PST

BAG NO. 17 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	26.4	3.0	DEG C
UV RAD	EPPLEY	3.08	0.17	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.402	PPM
NO2-UNC	B-NOX-1	0.146	PPM
PROPANE	DMS-1	0.0235	PPM
PROPENE	DMS-1	0.019	PPM

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038-2
4850	BK6800-1	BECKMAN HYDROCARBON GC MD 6800 SN100015D
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479
4130	EPPLEY	ARB LAB; EPPLEY 11692 UV RADIOMETER
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600; FID
2100	PN-1	RM 121; POROPAK N ; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE; FID

AFF- 35
NOX- AIR IRRADIATION
1980 SEP 11

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	PROPANE PPM DMS-1	PROPENE PPM DMS-1	LNC3/C3=	T DEG C DORIC-1
1 944	-16	-----	-----	-----	0.0236	0.019	0.2136	-----
1 950	-10	0.401	0.146	0.539	-----	-----	-----	22.0
1 1000	0	0.402	0.146	0.539	0.0235	0.019	0.2037	22.2
1 1010	10	0.399	0.146	0.539	-----	-----	-----	22.9
1 1015	15	-----	-----	-----	0.0241	0.019	0.2368	-----
1 1020	20	0.399	0.142	0.536	-----	-----	-----	23.8
1 1030	30	0.398	0.147	0.536	0.0240	0.018	0.2894	24.6
1 1040	40	0.393	0.146	0.537	-----	-----	-----	25.4
1 1045	45	-----	-----	-----	0.0237	0.018	0.2660	-----
1 1050	50	0.393	0.144	0.534	-----	-----	-----	26.1
1 1100	60	0.396	0.149	0.536	0.0234	0.018	0.2853	26.8
1 1110	70	0.393	0.144	0.534	-----	-----	-----	27.8
1 1115	75	-----	-----	-----	0.0238	0.017	0.3110	-----
1 1120	80	0.390	0.147	0.536	-----	-----	-----	28.8
1 1130	90	0.389	0.147	0.530	0.0238	0.017	0.3251	28.9
1 1140	100	0.387	0.149	0.532	-----	-----	-----	29.6
1 1145	105	-----	-----	-----	0.0239	0.017	0.3635	-----
1 1150	110	0.387	0.150	0.534	-----	-----	-----	30.2
1 1200	120	0.386	0.149	0.528	0.0239	0.016	0.3719	30.5

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	MEK PPM 10'C-600	ACETALD PPM 10'C-600	ACETONE PPM 10'C-600	TOLUENE PPM 10'C-600
1 944	-16	0.0001	0.003	0.0010	0.000
1 1200	120	-----	0.007	0.0014	-----

----- NO DATA TAKEN

NOTES

A K1 CALCULATED FROM UV RADIOMETER DATA

ANE PM -1	PROPENE PPM DMS-1	LNC3/C3=	T DEG C DORIC-1	UV RAD MW/CM2 EPFLEY	CO PPM BK6800-1	THC PPMC BK6800-1	BENZENE PPM 10'C-600
0236	0.019	0.2136	22.0	2.76	1.96	1.97	0.0002
0235	0.019	0.2037	22.2	2.76	1.90	2.27	
0241	0.019	0.2368	22.9	2.87	1.92	1.93	
0240	0.018	0.2894	23.8	3.02	1.80	1.92	
0237	0.018	0.2660	24.6	3.09	1.93	2.00	
0234	0.018	0.2853	25.4	3.09	1.95	2.02	
0238	0.017	0.3110	26.1	3.13	1.93	1.96	
0238	0.017	0.3251	26.8	3.21	1.99	1.98	
0239	0.017	0.3635	27.8	3.21	1.88	1.93	
0239	0.016	0.3719	28.8	3.24	1.91	2.00	
			28.9	3.21	1.95	1.96	
			29.6				
			30.2	3.26	1.96	1.94	
			30.5	3.13	1.97	2.02	0.0001

UENE
PM
C-600

0.000

AFF- 36
PROPENE/NOX CONDITIONING
1980 SEP 12

0705: BAG FILLED WITH PURE AIR.
0731: 15 ML NO2 INJECTED
0733: 15 ML NO INJECTED
0735: 29.5 ML PROPENE ADDED
0930: BAG UNCOVERED

T=0 AT 930 PST

BAG NO. 18 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	27.8	5.0	DEG C

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038-2
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	T DEG C DORIC-1
1 925	-5	0.000	0.339	0.352	0.692	19.7
1 1000	30	0.007	0.280	0.402	0.684	23.0
1 1030	60	0.012	0.209	0.464	0.668	25.0
1 1100	90	0.026	0.131	0.508	0.648	26.8
1 1130	120	0.061	0.059	0.558	0.618	29.0
1 1230	180	0.253	0.009	0.540	0.541	31.8
1 1300	210	0.374	0.007	0.500	0.499	32.9
1 1330	240	0.476	0.006	0.492	0.491	33.9

----- NO DATA TAKEN

AFF- 37
OZONE DECAY
1980 SEP 12-15

DAY 1 (SEPT. 12)
1500: START PURE AIR FILL.
1605-1610: 9.5 LITERS 2.5% OZONE INJECTED
1622: END FILL.
DAY 4 (SEPT. 15)
BAG STILL 75% FULL

RESULTS:
OZONE DECAY RATE (63.7 HRS) = 0.40 %/HR

T=0 AT 1635 PST

BAG NO. 18 USED

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790
1 1635	0	4.361
4 815	3820	3.323

----- NO DATA TAKEN

AFF- 38
PURE AIR PHOTOLYSIS
1980 SEP 15

1030: BAG FILLED WITH PURE AIR.
1221: BAG UNCOVERED

RESULTS: O3 FORMATION RATE = 3.1 PPB/HR

T=0 AT 1221 PST

BAG NO. 18 USED

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
2100	PN-1	RM 121; POROPAK N ; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE; FID
1790	D-1790	DASIBI 1790 OZONE MONITOR

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	PROPENE PPM DMS-1	METHANE PPM PN-1	ETHENE PPM PN-1	ETHANE PPM PN-1	ACETYLEN PPM DMS-1	ACETYLEN PPM PN 1
1 1210	-11	0.010	-----	-----	-----	-----	-----	-----
1 1212	-9	-----	0.001	2.30	0.0044	0.0084	0.0045	0.0052
1 1300	39	0.014	-----	-----	-----	-----	-----	-----
1 1400	99	0.017	-----	-----	-----	-----	-----	-----
1 1500	159	0.019	-----	-----	-----	-----	-----	-----
1 1555	214	0.021	-----	-----	-----	-----	-----	-----

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	I-C4= PPM DMS-1	I-C5 PPM DMS-1
1 1212	-9	0.0004	0.0002

----- NO DATA TAKEN

ENE M -1	ETHANE PPM PN-1	ACETYLEN PPM DMS-1	ACETYLEN PPM PN-1	PROPANE PPM DMS-1	I-C4 PPM DMS-1	N-C4 PPM DMS-1	1-C4= PPM DMS-1
0044	0.0084	0.0045	0.0052	0.0063	0.0031	0.004	0.0002
-----	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----	-----

2

AFF- 39

NOX- AIR IRRADIATION
1980 SEPT. 16

0800: BAG FILLED WITH PURE AIR.
0941: 6 ML NO2 INJECTED
0943: 18 ML NO INJECTED
0945: 0.8 ML PROPANE ADDED
0947: 0.8 ML PROPENE ADDED
NOTE: WATER CONDENSING INFO SAMPLE MANIFOLD. R.H.= 66%
1118: BAG UNCOVERED
1240: CLEAR TEFLON COVER ON
NO OZONE FORMATION OCCURRED.
BAG FILLED WITH 66% R. H. PURE AIR.

RESULTS:

CALC. AVG. OH= 30.8 *D LN(PROPANE/PROPENE)/DT= 0.067 PPT
CALC. RAD. INPUT= 16.0 * (AVG.OH)*(60+MIN.AVG.NO2)= 0.13 PPB/MIN
-D (NO)/DT = 0.09 PPB/MIN
AVG. K1 ESTIMATED FROM RADION. DATA = 0.44(+0.11)/MIN

T=0 AT 1118 PST

BAG NO. 18 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
TS	DORIC-1	35.5	3.2	DEG C
UV RAD	EPPLEY-2	4.07	0.66	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-03-1	0.398	PPM
NO2-UNC	B-03-1	0.132	PPM
PROPANE	DMS-1	0.0254	PPM
PROPENE	DMS-1	0.0205	PPM

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE; FID
2100	PN-1	RM 121; POROPAK N ; FID
1790	D-1790	DASIBI 1790 OZONE MONITOR
1212	D-1212	DASIBI 1212 OZONE MONITOR
4900	B-03-1	BENDIX 03 ANALYZER MD5513340-X SN32787-5
4850	BK6800-1	BECKMAN HYDROCARBON GC MD 6800 SN1000150
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG

AFF- 39
NOX- AIR IRRADIATION
1980 SEPT. 16

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	NO PPM B-03-1	NO2-UNC PPM B-03-1	NOX-UNC PPM B-03-1	TS DEG C DORIC-1	PROPANE PPM DMS-1	PROPENE PPM DMS-1	LNC3/C RAW DA
1 1000	-78	-----	-----	-----	-----	0.0254	0.0205	0.216
1 1010	-68	0.398	0.132	0.520	28.3	-----	-----	-----
1 1015	-63	-----	-----	-----	-----	0.0252	0.0202	0.218
1 1104	-14	-----	-----	-----	-----	0.0247	0.0197	0.225
1 1105	-13	0.376	0.128	0.500	31.8	-----	-----	-----
1 1110	-8	0.380	0.128	0.500	31.6	-----	-----	-----
1 1119	1	-----	-----	-----	-----	0.0249	0.0199	0.221
1 1120	2	0.381	0.126	0.499	32.1	-----	-----	-----
1 1130	12	0.384	0.129	0.520	33.7	-----	-----	-----
1 1134	16	-----	-----	-----	-----	0.0250	0.0195	0.249
1 1140	22	0.380	0.126	0.500	34.7	-----	-----	-----
1 1149	31	-----	-----	-----	-----	0.0247	0.0184	0.292
1 1150	32	0.371	0.124	0.492	35.3	-----	-----	-----
1 1200	42	0.378	0.124	0.500	36.7	-----	-----	-----
1 1204	46	-----	-----	-----	-----	0.0247	0.0178	0.328
1 1210	52	0.308	0.118	0.419	36.7	-----	-----	-----
1 1219	61	-----	-----	-----	-----	0.0239	0.0169	0.348
1 1220	62	0.370	0.125	0.500	37.0	-----	-----	-----
1 1230	72	0.370	0.120	0.490	37.4	-----	-----	-----
1 1234	76	-----	-----	-----	-----	0.0243	0.0167	0.372
1 1240	82	0.375	0.130	0.498	37.7	-----	-----	-----
1 1249	91	-----	-----	-----	-----	0.0246	0.0164	0.403
1 1250	92	0.365	0.122	0.480	37.9	-----	-----	-----
1 1300	102	0.367	0.128	0.485	39.1	-----	-----	-----
1 1304	106	-----	-----	-----	-----	0.0245	0.0159	0.434
1 1310	112	0.366	0.120	0.480	39.0	-----	-----	-----
1 1319	121	-----	-----	-----	-----	0.0243	0.0154	0.454
1 1320	122	0.370	0.120	0.480	39.5	-----	-----	-----

----- NO DATA TAKEN

TS EG C IC-1	PROPANE PPM DMS-1	PROPENE PPM DMS-1	LNC3/C3= RAW DATA	UV RAD MW/CM2 EPPLEY-2	CO PPM BK6800-1	THC PPMC BK6800-1	ETHENE PPM PN-1
-----	0.0254	0.0205	0.2167	-----	-----	-----	0.0106
8.3	-----	-----	-----	-----	-----	-----	-----
-----	0.0252	0.0202	0.2188	-----	-----	-----	-----
-----	0.0247	0.0197	0.2250	-----	-----	-----	-----
1.8	-----	-----	-----	-----	-----	-----	-----
1.6	-----	-----	-----	-----	1.91	2.08	-----
-----	0.0249	0.0199	0.2218	-----	-----	-----	-----
2.1	-----	-----	-----	2.94	1.95	2.08	-----
3.7	-----	-----	-----	-----	1.93	2.12	-----
-----	0.0250	0.0195	0.2496	-----	-----	-----	-----
4.7	-----	-----	-----	3.55	2.13	2.19	-----
-----	0.0247	0.0184	0.2921	-----	-----	-----	-----
5.3	-----	-----	-----	3.62	2.00	2.14	-----
6.7	-----	-----	-----	4.53	1.98	2.71	-----
-----	0.0247	0.0178	0.3283	-----	-----	-----	-----
6.7	-----	-----	-----	4.46	2.07	2.17	-----
-----	0.0239	0.0169	0.3483	-----	-----	-----	-----
7.0	-----	-----	-----	-----	2.00	2.15	-----
7.4	-----	-----	-----	4.93	2.05	2.19	-----
-----	0.0243	0.0167	0.3720	-----	-----	-----	-----
7.7	-----	-----	-----	-----	2.12	2.19	-----
-----	0.0246	0.0164	0.4030	-----	-----	-----	-----
7.9	-----	-----	-----	4.32	2.07	2.18	-----
9.1	-----	-----	-----	3.62	2.14	2.14	-----
-----	0.0245	0.0159	0.4345	-----	-----	-----	-----
9.0	-----	-----	-----	-----	2.08	2.19	-----
-----	0.0243	0.0154	0.4549	-----	-----	-----	0.0088
9.5	-----	-----	-----	4.67	2.16	2.26	-----

AFF- 39
NOX- AIR IRRADIATION
1980 SEPT. 16

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	ETHANE PPM PN-1	ACETYLEN PPM PN-1	BENZENE PPM 10'C-600	ACETALD PPM 10'C-600	PROPALD PPM 10'C-600	ACETONE PPM 10'C-600
1 1000	-78	0.0161	0.0104	0.0003	0.017	0.0004	0.0023
1 1319	121	0.0141	0.0092	-----	0.037	-----	0.0016

----- NO DATA TAKEN

NOTES

A 1200: DASIBI 1790 FLUCTUATES. REPLACED WITH DASIBI 1212

AFF- 40
UNLEADED GASOLINE: VARIABLE NOX
1980 SEP 18-19

DAY 1 (SEPT. 18)

0605: BAG FILLED WITH PURE AIR.
0620: WET BULB: 12.5 C DRY BULB: 20.8 C R.H.=38%
0647-0702: 740 MICROLITERS UNLEADED CHEVRON GASOLINE INJECTED.
0708-0710: 200 ML. FREON ADDED. BAG DIVIDED.
0807: 2.5 ML. NO2 INJECTED INTO SIDE A.
0809: 7.6 ML. NO INJECTED INTO SIDE A.
0830: 1.3 ML. NO2 ADDED INTO SIDE B.
0832: 3.8 ML. NO ADDED INTO SIDE B.
0900: BAG UNCOVERED (T=0).
0910: CLEAR TEFLON COVER PLACED OVER FRAME.
1600: BAG COVERED.

DAY 2 (SEPT. 19)

0730: SIDE A 60-70% FULL; SIDE B 15-20% FULL.
0900: BAG UNCOVERED.
0905: CLEAR TEFLON COVER IN PLACE.

RESULTS	DAY 1	DAY 2
-----	-----	-----
AVG. T (DEG. C)	37 (+-3)	34 (+-2)
AVG. UV (MW/CM2)	2.3 (+-0.6)	2.2 (+-0.5)

T=0 AT 900 PST

BAG NO. 18 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	32.8	5.7	DEG C	SIDE 1
T	DORIC-1	33.8	5.9	DEG C	SIDE 2
UV RAD	EPPLEY-2	2.24	0.54	MW/CM2	

ID	INST.	INITIAL CONC.	UNITS	
NO	B-NOX-1	0.321	PPM	SIDE 1
NO	B-NOX-1	0.119	PPM	SIDE 2
NO2-UNC	B-NOX-1	0.162	PPM	SIDE 1
NO2-UNC	B-NOX-1	0.133	PPM	SIDE 2
THC	BK6800-1	35.20	PPMC	SIDE 1
THC	BK6800-1	35.40	PPMC	SIDE 2

AFF- 40
UNLEADED GASOLINE: VARIABLE NOX
1980 SEP 18-19

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2750	SE-52C-2	RM-121; 30M SE-52 QUARTZ CAP. GC; FID
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1600	BK6800-2	BECKMAN CO,HC ANALYZER SN:100016
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG
2000	ECD-1	RM-121; 12" 5% CARBOWAX-400 GC; ECD

AFF- 40
UNLEADED GASOLINE: VARIABLE NOX
1980 SEP 18-19

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 OZONE PPM D-1790	SIDE 2 OZONE PPM D-1790	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1
1 615	-165	0.000	0.000	0.010	0.010	0.001	0.001	0.010
1 840	-20	0.000	-----	0.321	-----	0.162	-----	0.503
1 850	-10	-----	0.000	-----	0.119	-----	0.133	-----
1 1005	65	0.565	-----	0.011	-----	0.239	-----	0.249
1 1015	75	-----	0.357	-----	0.013	-----	0.129	-----
1 1105	125	0.622	-----	0.012	-----	0.209	-----	0.222
1 1115	135	-----	0.403	-----	0.018	-----	0.115	-----
1 1205	185	0.658	-----	0.018	-----	0.181	-----	0.198
1 1215	195	-----	0.433	-----	0.019	-----	0.099	-----
1 1305	245	0.652	-----	0.021	-----	0.155	-----	0.173
1 1315	255	-----	0.441	-----	0.022	-----	0.086	-----
1 1405	305	0.649	-----	0.022	-----	0.122	-----	0.141
1 1415	315	-----	0.431	-----	0.023	-----	0.070	-----
1 1505	365	0.595	-----	0.025	-----	0.108	-----	0.132
1 1515	375	-----	0.379	-----	0.026	-----	0.065	-----
1 1605	425	0.594	-----	0.027	-----	0.097	-----	0.119
1 1615	435	-----	0.387	-----	0.027	-----	0.060	-----
2 835	1415	-----	0.255	-----	0.017	-----	0.038	-----
2 845	1425	0.436	-----	0.018	-----	0.052	-----	0.067
2 1005	1505	0.398	-----	0.015	-----	0.056	-----	0.068
2 1015	1515	-----	0.217	-----	0.015	-----	0.049	-----
2 1105	1565	0.377	-----	0.018	-----	0.058	-----	0.072
2 1115	1575	-----	0.202	-----	0.019	-----	0.053	-----
2 1205	1625	0.360	-----	0.018	-----	0.059	-----	0.072
2 1215	1635	-----	0.197	-----	0.019	-----	0.057	-----
2 1305	1685	0.341	-----	0.018	-----	0.054	-----	0.069
2 1315	1695	-----	0.190	-----	0.019	-----	0.056	-----
2 1405	1745	0.332	-----	0.020	-----	0.053	-----	0.070
2 1415	1755	-----	0.177	-----	0.020	-----	0.052	-----
2 1505	1805	0.317	-----	0.021	-----	0.051	-----	0.069
2 1515	1815	-----	0.167	-----	0.021	-----	0.053	-----

----- NO DATA TAKEN

SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1
0.001	0.001	0.010	0.010	1.08	1.08
0.162	-----	0.503	-----	35.20	-----
-----	0.133	-----	0.257	-----	35.40
0.239	-----	0.249	-----	30.20	-----
-----	0.129	-----	0.139	-----	31.30
0.209	-----	0.222	-----	28.20	-----
-----	0.115	-----	0.129	-----	30.40
0.181	-----	0.198	-----	-----	-----
-----	0.099	-----	0.113	-----	28.80
0.155	-----	0.173	-----	28.70	-----
-----	0.086	-----	0.103	-----	29.10
0.122	-----	0.141	-----	27.00	-----
-----	0.070	-----	0.091	-----	28.50
0.108	-----	0.132	-----	-----	-----
-----	0.065	-----	0.089	-----	-----
0.097	-----	0.119	-----	26.20	-----
-----	0.060	-----	0.082	-----	28.10
-----	0.038	-----	0.049	-----	27.60
0.052	-----	0.067	-----	26.70	-----
0.056	-----	0.068	-----	25.90	-----
-----	0.049	-----	0.061	-----	27.90
0.058	-----	0.072	-----	25.90	-----
-----	0.053	-----	0.068	-----	27.50
0.059	-----	0.072	-----	25.70	-----
-----	0.057	-----	0.071	-----	27.30
0.054	-----	0.069	-----	25.30	-----
-----	0.056	-----	0.070	-----	26.90
0.053	-----	0.070	-----	25.20	-----
-----	0.052	-----	0.069	-----	26.40
0.051	-----	0.069	-----	25.00	-----
-----	0.053	-----	0.071	-----	26.80

AFF- 40
UNLEADED GASOLINE: VARIABLE NOX
1980 SEP 18-19

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-2	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET
1 615	-165	18.5	18.5	-----	0.0	0.0	0.	0.
1 840	-20	28.0	-----	-----	0.2	-----	1.	-----
1 850	-10	-----	29.9	-----	-----	0.4	-----	1.
1 1005	65	34.0	-----	2.38	92.0	-----	1.	-----
1 1015	75	-----	36.2	2.51	-----	9.8	-----	0.
1 1105	125	37.4	-----	3.02	63.0	-----	0.	-----
1 1115	135	-----	39.7	2.98	-----	6.5	-----	0.
1 1205	185	38.2	-----	2.79	42.0	-----	1.	-----
1 1215	195	-----	40.2	2.76	-----	4.0	-----	0.
1 1305	245	38.6	-----	2.43	32.4	-----	7.	-----
1 1315	255	-----	39.2	2.35	-----	2.0	-----	1.
1 1405	305	39.5	-----	1.94	24.0	-----	20.	-----
1 1415	315	-----	38.3	1.83	-----	2.0	-----	1.
1 1505	365	37.2	-----	1.41	17.7	-----	38.	-----
1 1515	375	-----	37.2	1.30	-----	3.8	-----	2.
1 1605	425	32.8	-----	-----	12.8	-----	62.	-----
1 1615	435	-----	32.3	-----	-----	1.1	-----	3.
2 835	1415	-----	23.2	-----	-----	0.3	-----	1.
2 845	1425	23.4	-----	-----	0.4	-----	6.	-----
2 1005	1505	28.8	-----	2.35	0.2	-----	15.	-----
2 1015	1515	-----	32.3	2.57	-----	0.2	-----	1.
2 1105	1565	31.8	-----	2.65	0.2	-----	53.	-----
2 1115	1575	-----	35.2	2.68	-----	0.2	-----	1.
2 1205	1625	33.7	-----	2.57	0.2	-----	67.	-----
2 1215	1635	-----	35.6	2.54	-----	0.2	-----	2.
2 1305	1685	35.4	-----	2.31	0.4	-----	67.	-----
2 1315	1695	-----	35.4	2.24	-----	0.5	-----	2.
2 1405	1745	35.0	-----	1.94	0.2	-----	62.	-----
2 1415	1755	-----	34.6	1.87	-----	0.2	-----	2.
2 1505	1805	33.0	-----	1.27	0.2	-----	53.	-----
2 1515	1815	-----	33.0	1.16	-----	0.2	-----	2.

----- NO DATA TAKEN

11 NOV 1981

PAGE 4

E 1 ENS /CC 143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET
0	0.0	0.	0.	0.	0.	0.	0.
2	-----	1.	-----	0.	-----	0.	-----
	0.4	-----	1.	-----	0.	-----	0.
0	-----	1.	-----	0.	-----	0.	-----
	9.6	-----	0.	-----	0.	-----	0.
0	-----	0.	-----	0.	-----	0.	-----
	6.5	-----	0.	-----	0.	-----	0.
0	-----	1.	-----	0.	-----	0.	-----
	4.0	-----	0.	-----	0.	-----	0.
4	-----	7.	-----	0.	-----	0.	-----
	2.0	-----	1.	-----	0.	-----	0.
0	-----	20.	-----	0.	-----	0.	-----
	2.0	-----	1.	-----	0.	-----	0.
7	-----	38.	-----	0.	-----	0.	-----
	3.8	-----	2.	-----	0.	-----	0.
8	-----	62.	-----	0.	-----	0.	-----
	1.1	-----	3.	-----	0.	-----	0.
	0.3	-----	1.	-----	0.	-----	0.
4	-----	6.	-----	0.	-----	0.	-----
2	-----	15.	-----	0.	-----	0.	-----
	0.2	-----	1.	-----	0.	-----	0.
2	-----	53.	-----	1.	-----	0.	-----
	0.2	-----	1.	-----	0.	-----	0.
2	-----	67.	-----	1.	-----	0.	-----
	0.2	-----	2.	-----	0.	-----	0.
4	-----	67.	-----	2.	-----	0.	-----
	0.5	-----	2.	-----	0.	-----	0.
2	-----	62.	-----	2.	-----	0.	-----
	0.2	-----	2.	-----	0.	-----	0.
2	-----	53.	-----	2.	-----	0.	-----
	0.2	-----	2.	-----	0.	-----	-----

2

AFF- 40
UNLEADED GASOLINE: VARIABLE NOX
1980 SEP 18-19

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UM3/CC TSI-023	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 1 N-C4 PPM DMS-1
1 612	-168	-----	-----	-----	-----	-----	-----	0.0065
1 615	-165	0.	0.	701.	701.	4.	4.	-----
1 726	-94	-----	-----	-----	-----	-----	-----	-----
1 840	-20	1.	-----	804.	-----	22.	-----	-----
1 850	-10	-----	1.	-----	1286.	-----	21.	-----
1 1005	65	105.	-----	2.8E 05	-----	5889.	-----	-----
1 1015	75	-----	84.	-----	2.2E 05	-----	4672.	-----
1 1105	125	119.	-----	1.7E 05	-----	5425.	-----	-----
1 1115	135	-----	77.	-----	1.5E 05	-----	3936.	-----
1 1205	185	104.	-----	1.3E 05	-----	4573.	-----	-----
1 1215	195	-----	71.	-----	1.0E 05	-----	3356.	-----
1 1305	245	91.	-----	8.7E 04	-----	3846.	-----	-----
1 1315	255	-----	59.	-----	8.3E 04	-----	2725.	-----
1 1405	305	81.	-----	7.0E 04	-----	3192.	-----	-----
1 1415	315	-----	50.	-----	5.7E 04	-----	2155.	-----
1 1440	340	-----	-----	-----	-----	-----	-----	0.0864
1 1505	365	67.	-----	4.7E 04	-----	2593.	-----	-----
1 1515	375	-----	40.	-----	4.2E 04	-----	1634.	-----
1 1605	425	57.	-----	3.7E 04	-----	2116.	-----	-----
1 1615	435	-----	31.	-----	2.7E 04	-----	1241.	-----
2 740	1360	-----	-----	-----	-----	-----	-----	0.0811
2 833	1413	-----	-----	-----	-----	-----	-----	-----
2 835	1415	-----	1.	-----	627.	-----	16.	-----
2 845	1425	1.	-----	1421.	-----	46.	-----	-----
2 1005	1505	50.	-----	1051.	-----	428.	-----	-----
2 1015	1515	-----	0.	-----	842.	-----	10.	-----
2 1105	1565	2.	-----	1295.	-----	52.	-----	-----
2 1115	1575	-----	0.	-----	775.	-----	12.	-----
2 1205	1625	2.	-----	1086.	-----	48.	-----	-----
2 1215	1635	-----	-0.	-----	711.	-----	13.	-----
2 1305	1685	1.	-----	736.	-----	48.	-----	-----
2 1308	1688	-----	-----	-----	-----	-----	-----	0.0805
2 1315	1695	-----	2.	-----	722.	-----	37.	-----
2 1405	1745	3.	-----	600.	-----	53.	-----	-----
2 1415	1755	-----	1.	-----	1306.	-----	20.	-----
2 1416	1756	-----	-----	-----	-----	-----	-----	-----
2 1505	1805	1.	-----	954.	-----	37.	-----	-----
2 1515	1815	-----	33.	-----	-6202.	-----	499.	-----

----- NO DATA TAKEN

	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 1 N-C4 PPM DMS-1	SIDE 2 N-C4 PPM DMS-1	SIDE 1 C5-ISOMS PPM SE-52C-2	SIDE 2 C5-ISOMS PPM SE-52C-2
	-----	-----	0.0065	0.0065	-----	-----
	4.	4.	-----	-----	-----	-----
	22.	-----	-----	-----	0.0167	0.0167
	-----	21.	-----	-----	-----	-----
	5889.	-----	-----	-----	0.0164	-----
05	-----	4672.	-----	-----	-----	-----
	5425.	-----	-----	-----	-----	-----
05	-----	3936.	-----	-----	-----	0.0139
	4573.	-----	-----	-----	0.0126	-----
05	-----	3356.	-----	-----	-----	-----
	3846.	-----	-----	-----	-----	-----
04	-----	2725.	-----	-----	-----	0.0137
	3192.	-----	-----	-----	0.0116	-----
04	-----	2155.	-----	-----	-----	-----
	-----	-----	0.0864	-----	-----	-----
	2593.	-----	-----	-----	-----	-----
04	-----	1634.	-----	0.0857	-----	0.0138
	2116.	-----	-----	-----	-----	-----
04	-----	1241.	-----	-----	-----	-----
	-----	-----	0.0811	-----	0.0156	-----
	-----	-----	-----	0.0865	-----	-----
	-----	16.	-----	-----	-----	0.0148
	46.	-----	-----	-----	-----	-----
	428.	-----	-----	-----	0.0136	-----
	-----	10.	-----	-----	-----	-----
	52.	-----	-----	-----	-----	-----
	-----	12.	-----	-----	-----	0.0148
	48.	-----	-----	-----	0.0122	-----
	-----	13.	-----	-----	-----	-----
	48.	-----	-----	-----	-----	-----
	-----	-----	0.0805	-----	0.0137	-----
	-----	37.	-----	-----	-----	-----
	53.	-----	-----	-----	-----	-----
	-----	20.	-----	-----	-----	-----
	-----	-----	-----	0.0839	-----	0.0141
	37.	-----	-----	-----	-----	-----
	-----	499.	-----	-----	-----	-----

AFF- 40
UNLEADED GASOLINE: VARIABLE NOX
1980 SEP 18-19

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 I-C5 PPM DMS-1	SIDE 2 I-C5 PPM DMS-1	SIDE 1 N-C5 PPM DMS-1	SIDE 2 N-C5 PPM DMS-1	SIDE 1 2,2-DMB PPM DMS-1	SIDE 2 2,2-DMB PPM DMS-1	SIDE 2,3-DM PPM DMS-1
1 612	-168	0.0004	0.0004	0.0001	0.0001	-----	-----	-----
1 726	-94	0.4388	0.4388	0.1035	0.1035	0.0182	0.0182	0.038
1 1440	340	0.3909	-----	0.0886	-----	0.0089	-----	0.030
1 1515	375	-----	0.3957	-----	0.0910	-----	0.0092	-----
2 740	1360	-----	-----	0.0867	-----	0.0094	-----	0.029
2 833	1413	-----	0.4112	-----	0.0960	-----	0.0092	-----
2 1308	1688	0.3750	-----	0.0835	-----	0.0089	-----	0.028
2 1416	1756	-----	0.3871	-----	0.0898	-----	0.0089	-----

----- NO DATA TAKEN

	SIDE 1 2,2-DMB PPM DMS-1	SIDE 2 2,2-DMB PPM DMS-1	SIDE 1 2,3-DMB PPM DMS-1	SIDE 2 2,3-DMB PPM DMS-1	SIDE 1 2ME-C5 PPM DMS-1	SIDE 2 2ME-C5 PPM DMS-1	2ME-C4=2 PPM DMS-1
1	-----	-----	-----	-----	-----	-----	-----
5	0.0182	0.0182	0.0388	0.0388	0.1604	0.1604	0.0307
-	0.0089	-----	0.0307	-----	0.1385	-----	-----
0	-----	0.0092	-----	0.0316	-----	0.1345	-----
-	0.0094	-----	0.0298	-----	0.1363	-----	-----
0	-----	0.0092	-----	0.0331	-----	0.1487	-----
-	0.0089	-----	0.0289	-----	0.1326	-----	-----
8	-----	0.0089	-----	0.0289	-----	0.1363	-----

2

AFF- 40
UNLEADED GASOLINE: VARIABLE NOX
1980 SEP 18-19

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 3ME-C5 PPM DMS-1	SIDE 2 3ME-C5 PPM DMS-1	SIDE 1 CYCL-C5 PPM DMS-1	SIDE 2 CYCL-C5 PPM DMS-1	SIDE 1 N-C6 PPM SE-52C-2	SIDE 1 N-C6 PPM DMS-1	SIDE N-C PPM SE-52
1 612	-168	-----	-----	-----	-----	-----	-----	-----
1 726	-94	0.1073	0.1073	0.0111	0.0111	0.0234	0.0849	0.02
1 1005	65	-----	-----	-----	-----	0.0292	-----	-----
1 1115	135	-----	-----	-----	-----	-----	-----	0.02
1 1205	185	-----	-----	-----	-----	0.0221	-----	-----
1 1315	255	-----	-----	-----	-----	-----	-----	0.02
1 1405	305	-----	-----	-----	-----	0.0203	-----	-----
1 1440	340	0.0905	-----	0.0136	-----	-----	0.0707	-----
1 1515	375	-----	0.0883	-----	0.0121	-----	-----	0.02
2 740	1360	0.0897	-----	0.0141	-----	0.0266	0.0707	-----
2 833	1413	-----	0.0952	-----	0.0167	-----	-----	-----
2 835	1415	-----	-----	-----	-----	-----	-----	0.02
2 1005	1505	-----	-----	-----	-----	0.0231	-----	-----
2 1115	1575	-----	-----	-----	-----	-----	-----	0.02
2 1205	1625	-----	-----	-----	-----	0.0200	-----	-----
2 1308	1688	0.0865	-----	0.0136	-----	0.0230	0.0685	-----
2 1416	1756	-----	0.0908	-----	0.0146	-----	-----	0.02

----- NO DATA TAKEN

SIDE 1 N-C6 PPM SE-52C-2	SIDE 1 N-C6 PPM DMS-1	SIDE 2 N-C6 PPM SE-52C-2	SIDE 2 N-C6 PPM DMS-1	SIDE 1 N-C7 PPM SE-52C-2	SIDE 2 N-C7 PPM SE-52C-2
0.0234	0.0849	0.0234	0.0849	0.0099	0.0099
0.0292				0.0095	
		0.0255			0.0087
0.0221				0.0074	
		0.0245			0.0083
0.0203				0.0068	
	0.0707				
		0.0237	0.0721		0.0074
0.0266	0.0707			0.0087	
			0.0807		
		0.0256			0.0086
0.0231				0.0079	
		0.0255			0.0086
0.0200				0.0069	
0.0230	0.0685			0.0078	
		0.0239	0.0712		0.0082

2

AFF- 40
UNLEADED GASOLINE: VARIABLE NOX
1980 SEP 18-19

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 N-C8 PPM SE-52C-2	SIDE 2 N-C8 PPM SE-52C-2	SIDE 1 TOLUENE PPM SE-52C-2	SIDE 2 TOLUENE PPM SE-52C-2	SIDE 1 O-XYL PPM SE-52C-2	SIDE 2 O-XYL PPM SE-52C-2	SIDE C2BE PPM SE-52
1 726	-94	0.0440	0.0440	0.6069	0.6069	0.0229	0.0229	0.03
1 1005	65	0.0395	-----	0.6169	-----	0.0210	-----	0.03
1 1115	135	-----	0.0362	-----	0.5693	-----	0.0196	-----
1 1205	185	0.0309	-----	0.5014	-----	0.0168	-----	0.02
1 1315	255	-----	0.0344	-----	0.5516	-----	0.0185	-----
1 1405	305	0.0287	-----	0.4692	-----	0.0149	-----	0.02
1 1515	375	-----	0.0327	-----	0.5461	-----	0.0178	-----
2 740	1360	0.0335	-----	0.5710	-----	0.0168	-----	0.02
2 835	1415	-----	0.0344	-----	0.5618	-----	0.0177	-----
2 1005	1505	0.0320	-----	0.5303	-----	0.0160	-----	0.02
2 1115	1575	-----	0.0345	-----	0.5603	-----	0.0177	-----
2 1205	1625	0.0279	-----	0.4706	-----	0.0142	-----	0.02
2 1308	1688	0.0314	-----	0.5255	-----	0.0154	-----	0.02
2 1416	1756	-----	0.0334	-----	0.5445	-----	0.0170	-----

----- NO DATA TAKEN

11 NOV 1981

PAGE 8

SIDE 1 O-XYL PPM SE-52C-2	SIDE 2 O-XYL PPM SE-52C-2	SIDE 1 C2BENZ PPM SE-52C-2	SIDE 2 C2BENZ PPM SE-52C-2	SIDE 1 124TMEBZ RAW DATA SE-52C-2	SIDE 2 124TMEBZ RAW DATA SE-52C-2
0.0229	0.0229	0.0302	0.0302	1.8E 04	1.8E 04
0.0210	-----	0.0300	-----	1.3E 04	-----
-----	0.0196	-----	0.0325	-----	1.2E 04
0.0168	-----	0.0249	-----	8453.	-----
-----	0.0185	-----	0.0271	-----	9997.
0.0149	-----	0.0231	-----	6590.	-----
-----	0.0178	-----	0.0264	-----	8598.
0.0168	-----	0.0268	-----	6204.	-----
-----	0.0177	-----	0.0268	-----	8458.
0.0160	-----	0.0255	-----	5768.	-----
-----	0.0177	-----	0.0269	-----	8018.
0.0142	-----	0.0230	-----	5047.	-----
0.0154	-----	0.0253	-----	5271.	-----
-----	0.0170	-----	0.0263	-----	7075.

2

AFF- 40
UNLEADED GASOLINE: VARIABLE NOX
1980 SEP 18-19

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 FREON 12 RAW DATA DMS-1	SIDE 2 FREON 12 RAW DATA DMS-1	SIDE 1 CO PPM BK6800-2	SIDE 2 CO PPM BK6800-2	SIDE 1 PAN PPM ECD-1	SIDE 2 PAN PPM ECD-1	SIDE HCHO PPM CA
1 612	-168	-----	-----	-----	-----	0.000	0.000	-----
1 615	-165	-----	-----	1.25	1.25	-----	-----	-----
1 726	-94	271.4	271.4	-----	-----	-----	-----	-----
1 735	-85	-----	-----	-----	-----	-----	-----	0.02
1 840	-20	-----	-----	1.41	-----	-----	-----	-----
1 850	-10	-----	-----	-----	1.32	-----	-----	-----
1 944	44	-----	-----	-----	-----	0.000	-----	-----
1 1000	60	-----	-----	-----	-----	-----	0.000	-----
1 1005	65	-----	-----	1.53	-----	-----	-----	-----
1 1015	75	-----	-----	-----	1.55	-----	-----	-----
1 1105	125	-----	-----	1.70	-----	-----	-----	-----
1 1115	135	-----	-----	-----	1.63	-----	-----	-----
1 1150	170	-----	-----	-----	-----	-----	-----	0.21
1 1205	185	-----	-----	-----	-----	-----	-----	-----
1 1211	191	-----	-----	-----	-----	-----	-----	-----
1 1215	195	-----	-----	-----	1.86	-----	-----	-----
1 1305	245	-----	-----	1.97	-----	-----	-----	-----
1 1315	255	-----	-----	-----	1.95	-----	-----	-----
1 1405	305	-----	-----	2.10	-----	-----	-----	-----
1 1415	315	-----	-----	-----	2.14	-----	-----	-----
1 1440	340	275.5	-----	-----	-----	-----	-----	-----
1 1505	365	-----	-----	-----	-----	0.041	-----	-----
1 1515	375	-----	274.4	-----	-----	-----	0.019	-----
1 1550	410	-----	-----	-----	-----	-----	-----	0.31
1 1605	425	-----	-----	2.25	-----	-----	-----	-----
1 1612	432	-----	-----	-----	-----	-----	-----	-----
1 1615	435	-----	-----	-----	2.30	-----	-----	-----
2 740	1360	255.5	-----	-----	-----	0.007	-----	-----
2 750	1370	-----	-----	-----	-----	-----	0.004	-----
2 816	1396	-----	-----	-----	-----	-----	-----	0.37
2 833	1413	-----	279.5	-----	-----	-----	-----	-----
2 835	1415	-----	-----	-----	2.26	-----	-----	-----
2 845	1425	-----	-----	2.37	-----	-----	-----	-----
2 1005	1505	-----	-----	2.39	-----	-----	-----	-----
2 1015	1515	-----	-----	-----	2.48	-----	-----	-----
2 1105	1565	-----	-----	2.48	-----	-----	-----	-----
2 1115	1575	-----	-----	-----	2.66	-----	-----	-----
2 1145	1605	-----	-----	-----	-----	-----	-----	0.33
2 1205	1625	-----	-----	2.63	-----	-----	-----	-----
2 1213	1633	-----	-----	-----	-----	-----	-----	-----
2 1215	1635	-----	-----	-----	2.86	-----	-----	-----
2 1305	1685	-----	-----	2.68	-----	-----	-----	-----
2 1308	1688	263.7	-----	-----	-----	-----	-----	-----
2 1315	1695	-----	-----	-----	3.04	-----	-----	-----
2 1405	1745	-----	-----	2.77	-----	-----	-----	-----
2 1415	1755	-----	-----	-----	3.10	-----	-----	-----
2 1416	1756	-----	268.3	-----	-----	-----	-----	-----
2 1450	1790	-----	-----	-----	-----	-----	-----	0.33
2 1505	1805	-----	-----	2.79	-----	-----	-----	-----
2 1506	1806	-----	-----	-----	-----	0.009	-----	-----
2 1512	1812	-----	-----	-----	-----	-----	-----	-----

----- NO DATA TAKEN

	SIDE 1 PAN PPM ECD-1	SIDE 2 PAN PPM ECD-1	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023
	0.000	0.000	-----	-----	-----	-----
	-----	-----	-----	-----	501.	501.
	-----	-----	0.023	0.023	-----	-----
	-----	-----	-----	-----	334.	-----
	0.000	-----	-----	-----	-----	668.
	-----	0.000	-----	-----	-----	-----
	-----	-----	-----	-----	2.1E 04	-----
	-----	-----	-----	-----	9686.	2.1E 04
	-----	-----	0.210	-----	-----	1.7E 04
	-----	-----	-----	0.209	6012.	-----
	-----	-----	-----	-----	-----	334.
	-----	-----	-----	-----	-2505.	-----
	-----	-----	-----	-----	-----	8350.
	-----	-----	-----	-----	2672.	-----
	-----	-----	-----	-----	-----	5344.
	0.041	-----	-----	-----	-5177.	-----
	-----	0.019	-----	-----	-----	4509.
	-----	-----	0.313	-----	-2338.	-----
	-----	-----	-----	0.255	-----	-----
	-----	-----	-----	-----	-----	501.
	0.007	-----	-----	-----	-----	-----
	-----	0.004	-----	0.266	-----	-----
	-----	-----	0.370	-----	-----	-----
	-----	-----	-----	-----	-----	167.
	-----	-----	-----	-----	668.	-----
	-----	-----	-----	-----	167.	-----
	-----	-----	-----	-----	-----	501.
	-----	-----	-----	-----	334.	-----
	-----	-----	0.339	-----	-----	501.
	-----	-----	-----	0.266	334.	-----
	-----	-----	-----	-----	-----	167.
	-----	-----	-----	-----	-167.	-----
	-----	-----	-----	-----	-----	167.
	-----	-----	-----	-----	0.	-----
	-----	-----	-----	-----	-----	668.
	-----	-----	0.333	-----	-----	-----
	0.009	-----	-----	-----	334.	-----
	-----	-----	-----	0.220	-----	-----

AFF- 40
UNLEADED GASOLINE: VARIABLE NOX
1980 SEP 18-19

CLOCK	ELAPSED	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE
TIME	TIME	FREON 12	FREON 12	CO	CO	PAN	PAN	HCHO
DY HR.	(MIN)	RAW DATA	RAW DATA	PPM	PPM	PPM	PPM	PPM
2 1515	1815	DMS-1	DMS-1	BK6800-2	BK6800-2	ECD-1	ECD-1	CA
		-----	-----	-----	3.27	-----	0.010	-----

----- NO DATA TAKEN

SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
CO	PAN	PAN	HCHO	HCHO	PART.024	PART.024
PPM	PPM	PPM	PPM	PPM	PART/CC	PART/CC
K4800-2	ECD-1	ECD-1	CA	CA	TSI-023	TSI-023
3.27	-----	0.010	-----	-----	-----	334.

AFF- 40
UNLEADED GASOLINE: VARIABLE NOX
1980 SEP 18-19

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.042 PART/CC TSI-023	SIDE 2 PART.042 PART/CC TSI-023	SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023	SIDE 1 PART.133 PART/CC TSI-023	SIDE 2 PART.133 PART/CC TSI-023	SIDE PART.1 PART/CC TSI-023
1 615	-165	87.	87.	89.	89.	24.	24.	0.
1 840	-20	174.	-----	178.	-----	96.	-----	12.
1 850	-10	-----	348.	-----	133.	-----	121.	-----
1 1005	65	4.2E 04	-----	1.8E 05	-----	3.8E 04	-----	1439.
1 1015	75	-----	1.7E 04	-----	1.5E 05	-----	2.9E 04	-----
1 1105	125	7482.	-----	9.4E 04	-----	5.5E 04	-----	3124.
1 1115	135	-----	6264.	-----	9.4E 04	-----	3.5E 04	-----
1 1205	185	1.2E 04	-----	5.7E 04	-----	5.3E 04	-----	2485.
1 1215	195	-----	4959.	-----	5.9E 04	-----	3.5E 04	-----
1 1305	245	-1566.	-----	4.1E 04	-----	4.7E 04	-----	2620.
1 1315	255	-----	2523.	-----	4.0E 04	-----	3.1E 04	-----
1 1405	305	87.	-----	2.5E 04	-----	3.9E 04	-----	2755.
1 1415	315	-----	-1305.	-----	2.6E 04	-----	2.6E 04	-----
1 1505	365	4176.	-----	1.3E 04	-----	3.2E 04	-----	2718.
1 1515	375	-----	1653.	-----	1.5E 04	-----	2.0E 04	-----
1 1605	425	3306.	-----	7548.	-----	2.6E 04	-----	2694.
1 1615	435	-----	174.	-----	1.0E 04	-----	1.5E 04	-----
2 835	1415	-----	174.	-----	222.	-----	48.	-----
2 845	1425	174.	-----	89.	-----	386.	-----	98.
2 1005	1505	174.	-----	133.	-----	265.	-----	74.
2 1015	1515	-----	87.	-----	133.	-----	120.	-----
2 1105	1565	261.	-----	311.	-----	241.	-----	135.
2 1115	1575	-----	0.	-----	178.	-----	72.	-----
2 1205	1625	87.	-----	222.	-----	313.	-----	123.
2 1215	1635	-----	174.	-----	178.	-----	169.	-----
2 1305	1685	261.	-----	178.	-----	337.	-----	111.
2 1315	1695	-----	87.	-----	266.	-----	169.	-----
2 1405	1745	87.	-----	178.	-----	217.	-----	98.
2 1415	1755	-----	348.	-----	178.	-----	96.	-----
2 1505	1805	174.	-----	178.	-----	167.	-----	86.
2 1515	1815	-----	348.	-----	133.	-----	=14388	-----

----- NO DATA TAKEN

SIDE 1 PART.133 PART/CC TSI-023	SIDE 2 PART.133 PART/CC TSI-023	SIDE 1 PART.237 PART/CC TSI-023	SIDE 2 PART.237 PART/CC TSI-023	SIDE 1 PART.422 PART/CC TSI-023	SIDE 2 PART.422 PART/CC TSI-023
24.	24.	0.	0.	0.	0.
96.	-----	12.	-----	7.	-----
-----	121.	-----	12.	-----	0.
3.8E 04	-----	1439.	-----	87.	-----
-----	2.9E 04	-----	861.	-----	47.
5.5E 04	-----	3124.	-----	193.	-----
-----	3.5E 04	-----	1242.	-----	40.
5.3E 04	-----	2485.	-----	93.	-----
-----	3.5E 04	-----	1501.	-----	67.
4.7E 04	-----	2620.	-----	100.	-----
-----	3.1E 04	-----	1279.	-----	60.
3.9E 04	-----	2755.	-----	93.	-----
-----	2.6E 04	-----	1279.	-----	47.
3.2E 04	-----	2718.	-----	80.	-----
-----	2.0E 04	-----	1107.	-----	47.
2.6E 04	-----	2694.	-----	113.	-----
-----	1.5E 04	-----	1033.	-----	27.
-----	48.	-----	12.	-----	0.
386.	-----	98.	-----	7.	-----
265.	-----	74.	-----	20.	-----
-----	120.	-----	0.	-----	0.
241.	-----	135.	-----	13.	-----
-----	72.	-----	25.	-----	0.
313.	-----	123.	-----	7.	-----
-----	169.	-----	37.	-----	-13.
337.	-----	111.	-----	20.	-----
-----	169.	-----	12.	-----	13.
217.	-----	98.	-----	13.	-----
-----	96.	-----	12.	-----	0.
169.	-----	86.	-----	13.	-----
-----	=14388	-----	7368.	-----	7.

AFF- 40
UNLEADED GASOLINE: VARIABLE NOX
1980 SEP 18-19

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.750 PART/CC TSI-023	SIDE 2 PART.750 PART/CC TSI-023
-------------------------	--------------------------	--	--

1 615	-165	0.	0.
1 840	-20	4.	-----
1 850	-10	-----	4.
1 1005	65	14.	-----
1 1015	75	-----	25.
1 1105	125	7.	-----
1 1115	135	-----	11.
1 1205	185	18.	-----
1 1215	195	-----	7.
1 1305	245	11.	-----
1 1315	255	-----	0.
1 1405	305	21.	-----
1 1415	315	-----	7.
1 1505	365	11.	-----
1 1515	375	-----	11.
1 1605	425	4.	-----
1 1615	435	-----	11.

2 835	1415	-----	4.
2 845	1425	0.	-----
2 1005	1505	218.	-----
2 1015	1515	-----	0.
2 1105	1565	0.	-----
2 1115	1575	-----	0.
2 1205	1625	0.	-----
2 1215	1635	-----	0.
2 1305	1685	-4.	-----
2 1315	1695	-----	7.
2 1405	1745	7.	-----
2 1415	1755	-----	4.
2 1505	1805	0.	-----
2 1515	1815	-----	-4.

----- NO DATA TAKEN

AFF- 41
NOX - AIR IRRADIATION
1980 OCT 1

0842: BAG FILLED WITH PURE AIR.
0845: WET BULB: 27.1 C, DRY BULB: 38.3 C, R.H.= 43%
1038: INJECT 6.0 ML NO2
1040: INJECT 18.0 ML NO
1042: .4 ML PROPENE AND .4 ML PROPANE ADDED
1120: BAG UNCOVERED
NO OZONE FORMATION OCCURRED.
BAG FILLED WITH 43% R. H. PURE AIR.

RESULTS:

CALC. AVG. OH = $30.8 * D \ln(\text{PROPANE}/\text{PROPENE})/DT = 0.067 \text{ PPT}$
CALC. RAD. INPUT = $16.0 * (\text{AVG. OH}) * (60 + \text{MIN AVG. NO}_2) = 0.11 \text{ PPB/MIN}$
-D (NO)/DT = 0.10 PPB/MIN
AVG. K1 ESTIMATED FROM RADIOM. DATA = $0.34 \pm 0.03/\text{MIN}$

T=0 AT 1120 PST

BAG NO. 18 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	43.3	1.0	DEG C
UV RAD	EPPLEY	2.71	0.25	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.398	PPM
NO2-UNC	B-NOX-1	0.139	PPM
PROPANE	DMS-1	0.0146	PPM
PROPENE	DMS-1	0.0106	PPM

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
2200	DMS-1	RM-121; DIMETHYLSULFOLANE; FID
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038-2
4850	BK6800-1	BECKMAN HYDROCARBON GC MD 6800 SN100015D
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479
4130	EPPLEY	ARB LAB; EPPLEY 11692 UV RADIOMETER
2100	PN-1	RM 121; POROPAK N ; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

AFF- 41
NOX - AIR IRRADIATION
1980 OCT 1

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	PROPANE PPM DMS-1	PROPENE PPM DMS-1	LNC3/C3=	T DEG DORIC
1 1110	-10	0.398	0.139	0.538	0.0146	0.0106	0.3145	41.
1 1130	10	0.393	0.139	0.526	-----	-----	-----	41.
1 1135	15	-----	-----	-----	0.0139	0.0097	0.3597	----
1 1140	20	0.392	0.139	0.526	-----	-----	-----	41.
1 1150	30	0.392	0.133	0.520	0.0133	0.0092	0.3635	43.
1 1200	40	0.390	0.134	0.520	-----	-----	-----	43.
1 1205	45	-----	-----	-----	0.0139	0.0090	0.4342	----
1 1210	50	0.391	0.137	0.521	-----	-----	-----	43.
1 1220	60	0.382	0.137	0.516	0.0138	0.0088	0.4553	43.
1 1230	70	0.383	0.136	0.514	-----	-----	-----	44.
1 1235	75	-----	-----	-----	0.0142	0.0089	0.4718	----
1 1240	80	0.387	0.137	0.516	-----	-----	-----	44.
1 1250	90	0.383	0.133	0.514	0.0141	0.0083	0.5281	44.
1 1300	100	0.383	0.131	0.514	-----	-----	-----	44.
1 1305	105	-----	-----	-----	0.0139	0.0082	0.5248	----
1 1310	110	0.383	0.131	0.514	-----	-----	-----	44.
1 1320	120	0.385	0.131	0.512	0.0120	0.0072	0.5054	44.

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	METHANE PPM BK6800-1	METHANE PPM PN-1	ETHENE PPM PN-1	ETHANE PPM PN-1	ACETYLEN PPM PN-1	HCHO PPM CA
1 1110	-10	1.79	1.80	0.0033	0.0065	0.0044	-----
1 1120	0	-----	-----	-----	-----	-----	0.025
1 1130	10	1.80	-----	-----	-----	-----	-----
1 1140	20	1.81	-----	-----	-----	-----	-----
1 1150	30	1.78	-----	-----	-----	-----	-----
1 1200	40	1.79	-----	-----	-----	-----	-----
1 1210	50	1.78	-----	-----	-----	-----	-----
1 1220	60	1.80	-----	-----	-----	-----	-----
1 1230	70	1.76	-----	-----	-----	-----	-----
1 1240	80	1.77	-----	-----	-----	-----	-----
1 1250	90	1.80	-----	-----	-----	-----	-----
1 1300	100	1.78	-----	-----	-----	-----	-----
1 1310	110	1.80	-----	-----	-----	-----	0.039
1 1320	120	1.79	1.76	0.0035	0.0069	0.0045	-----

----- NO DATA TAKEN

NOTES

A K1 CALCULATED FROM UV RADIOMETER DATA

NE	PROPENE PPM DMS-1	LNC3/C3=	T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY	CO PPM BK6800-1	THC PPMC BK6800-1
46	0.0106	0.3145	41.3	-----	1.74	1.35
	-----	-----	41.9	3.13	1.71	1.41
39	0.0097	0.3597	-----	-----	-----	-----
	-----	-----	41.9	3.06	1.76	1.36
33	0.0092	0.3635	43.0	2.95	1.72	1.36
	-----	-----	43.3	2.76	1.72	1.35
39	0.0090	0.4342	-----	-----	-----	-----
	-----	-----	43.4	2.79	1.70	1.39
38	0.0088	0.4553	43.7	2.76	1.77	1.37
	-----	-----	44.0	2.73	1.72	1.36
42	0.0089	0.4718	-----	-----	-----	-----
	-----	-----	44.1	2.57	1.81	1.38
41	0.0083	0.5281	44.2	2.46	1.79	1.34
	-----	-----	44.2	2.46	1.79	1.36
39	0.0082	0.5248	-----	-----	-----	-----
	-----	-----	44.1	2.46	1.78	1.37
20	0.0072	0.5054	44.2	2.35	1.79	1.33

NE	ACETYLEN PPM PN-1	HCHO PPM CA
55	0.0044	-----
	-----	0.025
	-----	-----
	-----	-----
	-----	-----
	-----	-----
	-----	-----
	-----	-----
	-----	-----
	-----	-----
	-----	0.039
9	0.0045	-----

AFF- 42
UNLEADED GASOLINE; VARIABLE FUEL
1980, OCT 2-3

DAY 1 (OCT. 2)

0608: BAG FILLED WITH PURE AIR.
0620: WET BULB: 10.0 C DRY BULB: 18.2 C R.H.=34%
0635: INJECTED 5.0 ML. NO2.
0637: INJECTED 15.0 ML. NO.
0639: 200 ML. FREON 12 ADDED.
0650: BAG DIVIDED.
0706-0718: 370 MICROLITERS UNLEADED GAS INJECTED INTO SIDE 1.
0740: 135 MICROLITERS UNLEADED GAS INJECTED INTO SIDE 2.
0900: BAG UNCOVERED (T=0).
1600: BAG COVERED.

DAY 2 (OCT. 3)

0700: BAG APPROX. 61 % FULL.
0900: BAG UNCOVERED.
1502: BAG COVERED.

RESULTS

AVG. T (DEG. C)
AVG. UV (MW/CM2)

DAY 1

38 (+-4)
2.0 (+-0.6)

DAY 2

36 (+-5)
2.4 (+-0.4)

T=0 AT 900 PST

BAG NO. 18 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	33.4	6.6	DEG C	SIDE 1
T	DORIC-1	36.4	7.0	DEG C	SIDE 2
UV RAD	EPPLEY-2	2.16	0.56	MW/CM2	

ID	INST.	INITIAL CONC.	UNITS	
NO	B-NOX-1	0.332	PPM	SIDE 1
NO	B-NOX-1	0.329	PPM	SIDE 2
NO2-UNC	B-NOX-1	0.129	PPM	SIDE 1
NO2-UNC	B-NOX-1	0.132	PPM	SIDE 2
THC	BK6800-1	36.70	PPMC	SIDE 1
THC	BK6800-1	19.80	PPMC	SIDE 2

AFF- 42
UNLEADED GASOLINE; VARIABLE FUEL
1980, OCT 2-3

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
1790	D-1790	DASIRI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
2100	PN-1	RM-121 POROPAK-N GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2750	SE-52C-2	RM-121; 30M SE-52 QUARTZ CAP. GC; FID
2000	ECD-1	RM-121; 12" 5% CARBOWAX-400 GC; ECD
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG

AFF- 42
 UNLEADED GASOLINE; VARIABLE FUEL
 1980, OCT 2-3

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 OZONE PPM D-1790	SIDE 2 OZONE PPM D-1790	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM D-NOX-1	SIDE NOX-1 PPM B-NOX-1
1 625	-155	0.000	0.000	0.000	0.000	0.002	0.002	0.0
1 730	-90	0.000	-----	0.332	-----	0.129	-----	0.0
1 815	-45	-----	0.001	-----	0.329	-----	0.132	-----
1 905	5	0.008	-----	0.205	-----	0.223	-----	0.0
1 915	15	-----	0.010	-----	0.182	-----	0.253	-----
1 935	35	0.412	-----	0.017	-----	0.290	-----	0.0
1 945	45	-----	0.265	-----	0.015	-----	0.346	-----
1 1005	65	0.546	-----	0.015	-----	0.231	-----	0.0
1 1015	75	-----	0.483	-----	0.013	-----	0.288	-----
1 1105	125	0.589	-----	0.019	-----	0.203	-----	0.0
1 1115	135	-----	0.689	-----	0.019	-----	0.218	-----
1 1205	185	0.632	-----	0.021	-----	0.170	-----	0.1
1 1215	195	-----	0.739	-----	0.022	-----	0.189	-----
1 1305	245	0.650	-----	0.023	-----	0.142	-----	0.1
1 1315	255	-----	0.758	-----	0.027	-----	0.156	-----
1 1405	305	0.638	-----	0.028	-----	0.117	-----	0.1
1 1415	315	-----	0.741	-----	0.029	-----	0.137	-----
1 1505	365	0.602	-----	0.021	-----	0.098	-----	0.1
1 1515	375	-----	0.704	-----	0.023	-----	0.110	-----
1 1605	425	0.572	-----	0.022	-----	0.083	-----	0.1
1 1615	435	-----	0.665	-----	0.025	-----	0.098	-----
2 835	1415	0.419	-----	0.022	-----	0.047	-----	0.0
2 845	1425	-----	0.506	-----	0.022	-----	0.048	-----
2 905	1445	0.408	-----	0.023	-----	0.050	-----	0.0
2 915	1455	-----	0.492	-----	0.025	-----	0.051	-----
2 1005	1505	0.379	-----	0.023	-----	0.056	-----	0.0
2 1015	1515	-----	0.461	-----	0.023	-----	0.053	-----
2 1105	1565	0.356	-----	0.023	-----	0.058	-----	0.0
2 1115	1575	-----	0.440	-----	0.024	-----	0.053	-----
2 1205	1625	0.343	-----	0.026	-----	0.055	-----	0.0
2 1215	1635	-----	0.420	-----	0.026	-----	0.053	-----
2 1305	1685	0.337	-----	0.027	-----	0.056	-----	0.0
2 1315	1695	-----	0.409	-----	0.027	-----	0.052	-----
2 1405	1745	0.328	-----	0.029	-----	0.054	-----	0.0
2 1415	1755	-----	0.316	-----	0.029	-----	0.049	-----
2 1505	1805	0.311	-----	0.029	-----	0.050	-----	0.0
2 1515	1815	-----	0.372	-----	0.030	-----	0.049	-----

----- NO DATA TAKEN

	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1
000	0.002	0.002	0.000	0.000	1.19	1.19
001	0.129	-----	0.483	-----	36.70	-----
002	-----	0.132	-----	0.482	-----	19.80
003	0.223	-----	0.478	-----	35.60	-----
004	-----	0.253	-----	0.478	-----	20.00
005	0.290	-----	0.308	-----	31.70	-----
006	-----	0.346	-----	0.367	-----	18.10
007	0.231	-----	0.249	-----	30.50	-----
008	-----	0.288	-----	0.307	-----	16.90
009	0.203	-----	0.220	-----	29.70	-----
010	-----	0.218	-----	0.241	-----	15.60
011	0.170	-----	0.192	-----	28.20	-----
012	-----	0.189	-----	0.212	-----	14.70
013	0.142	-----	0.165	-----	27.50	-----
014	-----	0.156	-----	0.183	-----	13.80
015	0.117	-----	0.142	-----	25.90	-----
016	-----	0.137	-----	0.163	-----	13.30
017	0.098	-----	0.119	-----	25.90	-----
018	-----	0.110	-----	0.132	-----	13.40
019	0.083	-----	0.102	-----	25.90	-----
020	-----	0.098	-----	0.121	-----	13.20
021	0.047	-----	0.067	-----	26.90	-----
022	-----	0.048	-----	0.068	-----	13.60
023	0.050	-----	0.072	-----	26.80	-----
024	-----	0.051	-----	0.073	-----	13.40
025	0.056	-----	0.077	-----	26.00	-----
026	-----	0.053	-----	0.076	-----	12.60
027	0.058	-----	0.078	-----	25.70	-----
028	-----	0.053	-----	0.075	-----	12.70
029	0.055	-----	0.078	-----	25.90	-----
030	-----	0.053	-----	0.078	-----	13.20
031	0.056	-----	0.078	-----	25.30	-----
032	-----	0.052	-----	0.078	-----	12.80
033	0.054	-----	0.079	-----	25.30	-----
034	-----	0.049	-----	0.074	-----	12.50
035	0.050	-----	0.076	-----	25.20	-----
036	-----	0.049	-----	0.073	-----	12.50

AFF- 42
UNLEADED GASOLINE; VARIABLE FUEL
1980, OCT 2-3

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-2	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE #PART> PART/CC CLIME
1 625	-155	17.8	17.8	-----	0.0	0.0	6.	6.
1 730	-90	23.0	-----	-----	1.0	-----	8.	-----
1 815	-45	-----	27.4	-----	-----	0.4	-----	11.
1 905	5	28.6	-----	1.49	4.4	-----	8.	-----
1 915	15	-----	32.0	1.68	-----	21.0	-----	11.
1 935	35	31.4	-----	2.13	108.0	-----	9.	-----
1 945	45	-----	35.7	2.27	-----	72.0	-----	8.
1 1005	65	33.8	-----	2.31	80.0	-----	8.	-----
1 1015	75	-----	38.4	2.31	-----	60.0	-----	10.
1 1105	125	38.0	-----	2.79	55.0	-----	6.	-----
1 1115	135	-----	43.0	2.72	-----	42.0	-----	8.
1 1205	185	40.0	-----	2.65	39.8	-----	12.	-----
1 1215	195	-----	44.2	2.57	-----	29.0	-----	11.
1 1305	245	41.6	-----	2.27	28.6	-----	12.	-----
1 1315	255	-----	43.7	2.16	-----	21.5	-----	12.
1 1405	305	39.5	-----	1.53	22.0	-----	21.	-----
1 1415	315	-----	41.8	1.41	-----	17.0	-----	15.
1 1505	365	37.6	-----	0.97	17.3	-----	28.	-----
1 1515	375	-----	39.0	0.86	-----	13.2	-----	13.
1 1605	425	36.1	-----	-----	13.2	-----	34.	-----
1 1615	435	-----	36.6	-----	-----	10.4	-----	14.
2 835	1415	25.0	-----	-----	0.2	-----	17.	-----
2 845	1425	-----	27.2	-----	-----	1.1	-----	14.
2 905	1445	25.6	-----	2.13	1.7	-----	17.	-----
2 915	1455	-----	28.1	2.20	-----	1.3	-----	15.
2 1005	1505	30.5	-----	2.43	1.1	-----	25.	-----
2 1015	1515	-----	35.6	2.54	-----	1.3	-----	15.
2 1105	1565	34.3	-----	2.79	0.6	-----	28.	-----
2 1115	1575	-----	40.2	2.84	-----	0.6	-----	12.
2 1205	1625	37.5	-----	2.95	0.4	-----	33.	-----
2 1215	1635	-----	41.7	2.87	-----	0.5	-----	11.
2 1305	1685	38.6	-----	2.13	0.4	-----	47.	-----
2 1315	1695	-----	40.6	1.98	-----	0.8	-----	22.
2 1405	1745	38.0	-----	1.79	0.6	-----	46.	-----
2 1415	1755	-----	40.5	1.68	-----	0.6	-----	15.
2 1505	1805	37.5	-----	-----	0.6	-----	48.	-----
2 1515	1815	-----	38.0	-----	-----	0.7	-----	16.

----- NO DATA TAKEN

11 NOV 1981

PAGE 4

DE 1 DENS 3/CC -143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET
0.0	0.0	6.	6.	0.	0.	0.	0.
1.0	-----	8.	-----	1.	-----	0.	-----
-----	0.4	-----	11.	-----	1.	-----	0.
6.4	-----	8.	-----	1.	-----	0.	-----
-----	21.0	-----	11.	-----	1.	-----	-----
8.0	-----	9.	-----	1.	-----	0.	-----
-----	72.0	-----	8.	-----	1.	-----	0.
0.0	-----	8.	-----	0.	-----	0.	-----
-----	60.0	-----	10.	-----	1.	-----	0.
5.0	-----	6.	-----	0.	-----	0.	-----
-----	42.0	-----	8.	-----	1.	-----	0.
7.8	-----	12.	-----	1.	-----	0.	-----
-----	29.0	-----	11.	-----	1.	-----	0.
8.6	-----	12.	-----	1.	-----	0.	-----
-----	21.5	-----	12.	-----	1.	-----	0.
2.0	-----	21.	-----	1.	-----	0.	-----
-----	17.0	-----	15.	-----	1.	-----	0.
7.3	-----	28.	-----	1.	-----	0.	-----
-----	13.2	-----	13.	-----	1.	-----	0.
3.2	-----	34.	-----	1.	-----	0.	-----
-----	10.4	-----	14.	-----	1.	-----	0.
0.2	-----	17.	-----	1.	-----	0.	-----
-----	1.1	-----	14.	-----	2.	-----	0.
1.7	-----	17.	-----	1.	-----	0.	-----
-----	1.3	-----	15.	-----	2.	-----	0.
1.1	-----	25.	-----	1.	-----	0.	-----
-----	1.3	-----	15.	-----	1.	-----	0.
0.6	-----	28.	-----	1.	-----	0.	-----
-----	0.6	-----	12.	-----	-----	-----	0.
0.4	-----	33.	-----	1.	-----	0.	-----
-----	0.5	-----	11.	-----	1.	-----	0.
0.4	-----	47.	-----	2.	-----	0.	-----
-----	0.8	-----	22.	-----	2.	-----	0.
0.6	-----	46.	-----	1.	-----	0.	-----
-----	0.6	-----	15.	-----	1.	-----	0.
0.6	-----	48.	-----	1.	-----	0.	-----
-----	0.7	-----	16.	-----	1.	-----	0.

2

AFF- 42
UNLEADED GASOLINE; VARIABLE FUEL
1980, OCT 2-3

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 BSCAT 10-4 M-1 MRI-388	SIDE 2 BSCAT 10-4 M-1 MRI-388	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UM3/CC TSI-023	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE AER.S UM2/C TSI-02
1 615	-165	-----	-----	-----	-----	-----	-----	-----
1 625	-155	0.6	0.6	1.	1.	168.	168.	17.
1 730	-70	0.9	-----	1.	-----	688.	-----	23.
1 815	-45	-----	1.0	-----	1.	-----	928.	-----
1 820	-40	-----	-----	-----	-----	-----	-----	-----
1 905	5	1.0	-----	1.	-----	1699.	-----	33.
1 915	15	-----	1.1	-----	6.	-----	3179.	-----
1 935	35	1.0	-----	73.	-----	2.5E 05	-----	3978.
1 945	45	-----	1.0	-----	18.	-----	1.6E 05	-----
1 1005	65	1.8	-----	120.	-----	1.8E 05	-----	5160.
1 1015	75	-----	1.2	-----	40.	-----	1.2E 05	-----
1 1105	125	3.0	-----	138.	-----	1.1E 05	-----	4841.
1 1115	135	-----	1.8	-----	70.	-----	8.2E 04	-----
1 1205	185	3.8	-----	127.	-----	8.2E 04	-----	4113.
1 1215	195	-----	2.2	-----	67.	-----	5.5E 04	-----
1 1305	245	4.2	-----	114.	-----	5.7E 04	-----	3463.
1 1315	255	-----	2.6	-----	67.	-----	4.3E 04	-----
1 1405	305	4.7	-----	93.	-----	4.3E 04	-----	2765.
1 1410	310	-----	-----	-----	-----	-----	-----	-----
1 1415	315	-----	2.8	-----	60.	-----	3.7E 04	-----
1 1505	365	4.3	-----	83.	-----	3.6E 04	-----	2210.
1 1515	375	-----	2.7	-----	48.	-----	2.5E 04	-----
1 1517	377	-----	-----	-----	-----	-----	-----	-----
1 1605	425	4.2	-----	76.	-----	2.2E 04	-----	1963.
1 1615	435	-----	2.7	-----	45.	-----	2.0E 04	-----
2 735	1355	-----	-----	-----	-----	-----	-----	-----
2 835	1415	1.2	-----	0.	-----	0.	-----	0.
2 845	1425	-----	1.3	-----	0.	-----	0.	-----
2 905	1445	1.4	-----	0.	-----	0.	-----	0.
2 915	1455	-----	1.4	-----	0.	-----	0.	-----
2 1005	1505	1.5	-----	0.	-----	0.	-----	0.
2 1015	1515	-----	1.3	-----	0.	-----	0.	-----
2 1105	1565	1.2	-----	5.	-----	1565.	-----	91.
2 1115	1575	-----	1.1	-----	3.	-----	578.	-----
2 1205	1625	1.1	-----	5.	-----	925.	-----	79.
2 1215	1635	-----	1.0	-----	6.	-----	700.	-----
2 1305	1685	1.6	-----	6.	-----	1152.	-----	92.
2 1315	1695	-----	1.7	-----	4.	-----	-250.	-----
2 1405	1745	1.1	-----	3.	-----	727.	-----	46.
2 1415	1755	-----	1.1	-----	2.	-----	494.	-----
2 1505	1805	1.1	-----	5.	-----	1021.	-----	67.
2 1515	1815	-----	1.1	-----	3.	-----	872.	-----

----- NO DATA TAKEN

SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 1 N-C4 PPM DMS-1	SIDE 2 N-C4 PPM DMS-1
168.	168.	17.	17.	0.0058	0.0058
668.		23.		0.0891	
	928.		26.		
1699.		33.			0.0463
	3179.		83.		
2.5E 05		3978.			
	1.6E 05		1210.		
1.8E 05		5160.			
	1.2E 05		2226.		
1.1E 05		4841.			
	8.2E 04		2848.		
8.2E 04		4113.			
	5.5E 04		2559.		
5.7E 04		3463.			
	4.3E 04		2195.		
4.3E 04		2765.		0.0822	
	3.7E 04		1850.		
3.6E 04		2210.			
	2.5E 04		1509.		
2.2E 04		1963.			
	2.0E 04		1273.		
				0.0790	
0.		0.			
	0.		0.		0.0403
0.		0.			
	0.		0.		
0.		0.			
	0.		0.		
1565.		91.			
	578.		68.		
925.		79.			
	700.		76.		
1152.		92.			
	-250.		59.		
727.		46.		0.0804	
	494.		45.		
1021.		67.			
	872.		58.		0.0382

AFF- 42
UNLEADED GASOLINE; VARIABLE FUEL
1980, OCT 2-3

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 C5-ISOMS PPM SE-52C-2	SIDE 2 C5-ISOMS PPM SE-52C-2	SIDE 1 I-C5 PPM DMS-1	SIDE 2 I-C5 PPM DMS-1	SIDE 1 N-C5 PPM DMS-1	SIDE 2 N-C5 PPM DMS-1	SIDE N-C5 PPM DMS-1
1 615	-165	-----	-----	0.0005	0.0005	0.0000	0.0000	0.0000
1 730	-90	-----	-----	0.4395	-----	0.1031	-----	0.087
1 735	-85	0.0208	-----	-----	-----	-----	-----	-----
1 820	-40	-----	-----	-----	0.2150	-----	0.0521	-----
1 900	0	-----	0.0084	-----	-----	-----	-----	-----
1 1005	65	0.0151	-----	-----	-----	-----	-----	-----
1 1115	135	-----	0.0071	-----	-----	-----	-----	-----
1 1205	185	0.0128	-----	-----	-----	-----	-----	-----
1 1315	255	-----	0.0061	-----	-----	-----	-----	-----
1 1410	310	0.0132	-----	0.3832	-----	0.0878	-----	0.071
1 1517	377	-----	0.0064	-----	0.1787	-----	0.0424	-----
2 735	1355	0.0132	-----	0.3677	-----	0.0839	-----	0.068
2 845	1425	-----	0.0065	-----	0.1746	-----	0.0402	-----
2 1005	1505	0.0103	-----	-----	-----	-----	-----	-----
2 1115	1575	-----	0.0040	-----	-----	-----	-----	-----
2 1208	1628	0.0114	-----	-----	-----	-----	-----	-----
2 1315	1695	-----	0.0057	-----	-----	-----	-----	-----
2 1405	1745	0.0113	-----	0.3699	-----	0.0843	-----	0.068
2 1515	1815	-----	0.0057	-----	0.1621	-----	0.0375	-----

----- NO DATA TAKEN

SIDE 2 N-C5 PPM MS-1	SIDE 1 N-C5 PPM DMS-1	SIDE 2 N-C5 PPM DMS-1	SIDE 1 N-C6 PPM DMS-1	SIDE 1 N-C6 PPM SE-52C-2	SIDE 2 N-C6 PPM DMS-1	SIDE 2 N-C6 PPM SE-52C-2
0005	0.0000	0.0000	0.0000	-----	0.0000	-----
-----	0.1031	-----	0.0874	-----	-----	-----
-----	-----	-----	-----	0.0282	-----	-----
2150	-----	0.0521	-----	-----	0.0505	-----
-----	-----	-----	-----	-----	-----	0.0116
-----	-----	-----	-----	0.0274	-----	-----
-----	-----	-----	-----	-----	-----	0.0134
-----	-----	-----	-----	0.0223	-----	-----
-----	0.0878	-----	0.0716	0.0232	-----	0.0111
1787	-----	0.0424	-----	-----	0.0315	0.0109
-----	0.0839	-----	0.0685	0.0232	-----	-----
1746	-----	0.0402	-----	-----	0.0322	0.0095
-----	-----	-----	-----	0.0193	-----	-----
-----	-----	-----	-----	-----	-----	0.0081
-----	-----	-----	-----	0.0188	-----	-----
-----	-----	-----	-----	-----	-----	0.0084
-----	0.0843	-----	0.0685	0.0187	-----	-----
1621	-----	0.0375	-----	-----	0.0284	0.0083

AFF- 42
UNLEADED GASOLINE; VARIABLE FUEL
1980, OCT 2-3

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 N-C7 PPM SE-52C-2	SIDE 2 N-C7 PPM SE-52C-2	SIDE 1 N-C8 PPM SE-52C-2	SIDE 2 N-C8 PPM SE-52C-2	SIDE 1 TOLUENE PPM 10'C-600	SIDE 1 TOLUENE PPM SE-52C-2	SIDE 2 TOLUENE PPM 10'C-600	SIDE 2 TOLUENE PPM SE-52C-2
1 615	-165	-----	-----	-----	-----	-----	-----	-----	-----
1 735	-85	0.0118	-----	0.0516	-----	-----	0.1815	-----	-----
1 820	-40	-----	-----	-----	-----	-----	-----	0.1904	-----
1 900	0	-----	0.0049	-----	0.0216	-----	-----	-----	0.0768
1 1005	65	0.0090	-----	0.0370	-----	-----	0.1510	-----	-----
1 1115	135	-----	0.0045	-----	0.0175	-----	-----	-----	0.0720
1 1205	185	0.0075	-----	0.0321	-----	-----	0.1320	-----	-----
1 1315	255	-----	0.0036	-----	0.0142	-----	-----	-----	0.0624
1 1410	310	0.0078	-----	0.0318	-----	0.3598	0.1349	-----	-----
1 1517	377	-----	0.0036	-----	0.0140	-----	-----	0.1598	0.0623
2 735	1355	0.0073	-----	0.0282	-----	0.3249	0.1254	-----	-----
2 845	1425	-----	0.0036	-----	0.0134	-----	-----	0.1567	0.0613
2 1005	1505	0.0067	-----	0.0273	-----	-----	0.1165	-----	-----
2 1115	1575	-----	0.0027	-----	0.0106	-----	-----	-----	0.0497
2 1208	1628	0.0064	-----	0.0263	-----	-----	0.1135	-----	-----
2 1315	1695	-----	0.0030	-----	0.0108	-----	-----	-----	0.0526
2 1405	1745	0.0064	-----	0.0263	-----	0.3340	0.1141	-----	-----
2 1515	1815	-----	0.0030	-----	0.0112	-----	-----	0.1436	0.0549

----- NO DATA TAKEN

AFF- 42
UNLEADED GASOLINE; VARIABLE FUEL
1980, OCT 2-3

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 O-XYL PPM 10'C-600	SIDE 1 O-XYL PPM SE-52C-2	SIDE 2 O-XYL PPM 10'C-600	SIDE 2 O-XYL PPM SE-52C-2	SIDE 1 C2BENZ PPM SE-52C-2	SIDE 2 C2BENZ PPM SE-52C-2	SIDE M+P-XY PPM 10'C-6
1 615	-165	-----	-----	-----	-----	-----	-----	-----
1 735	-85	0.1099	0.0522	-----	-----	0.0345	-----	0.662
1 820	-40	-----	-----	0.0555	-----	-----	-----	-----
1 900	0	-----	-----	-----	0.0226	-----	0.0148	-----
1 1005	65	-----	0.0407	-----	-----	0.0288	-----	-----
1 1115	135	-----	-----	-----	0.0178	-----	0.0137	-----
1 1205	185	-----	0.0347	-----	-----	0.0256	-----	-----
1 1315	255	-----	-----	-----	0.0143	-----	0.0118	-----
1 1410	310	0.0767	0.0337	-----	-----	0.0256	-----	0.380
1 1517	377	-----	-----	0.0275	0.0135	-----	0.0117	-----
2 735	1355	0.0671	0.0287	-----	-----	0.0229	-----	0.326
2 845	1425	-----	-----	0.0282	0.0078	-----	0.0114	-----
2 1005	1505	-----	0.0281	-----	-----	0.0222	-----	-----
2 1115	1575	-----	-----	-----	0.0103	-----	0.0095	-----
2 1208	1628	-----	0.0266	-----	-----	0.0215	-----	-----
2 1315	1695	-----	-----	-----	0.0102	-----	0.0097	-----
2 1405	1745	0.0721	0.0265	-----	-----	0.0218	-----	0.306
2 1515	1815	-----	-----	0.0235	0.0105	-----	0.0099	-----

----- NO DATA TAKEN

	SIDE 1 C2BENZ PPM	SIDE 2 C2BENZ PPM	SIDE 1 M+P-XYL PPM	SIDE 2 M+P-XYL PPM	SIDE 1 124TMEBZ RAW DATA	SIDE 2 124TMEBZ RAW DATA
2C-2	SE-52C-2	SE-52C-2	10'C-600	10'C-600	SE-52C-2	SE-52C-2
	0.0345		0.6629		2.0E 04	
				0.3409		
226		0.0148				8820.
	0.0288				1.2E 04	
78		0.0137				3863.
	0.0256				8749.	
43		0.0118				4249.
	0.0256		0.3809		3629.	
35		0.0117		0.1263		4314.
	0.0229		0.3262		1845.	
78		0.0114		0.1147		2618.
	0.0222				1661.	
03		0.0095				2413.
	0.0215				1818.	
02		0.0097				2371.
	0.0218		0.3062		2120.	
05		0.0099		0.0858		3065.

AFF- 42
UNLEADED GASOLINE; VARIABLE FUEL
1980; OCT 2-3

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 FREON 12 RAW DATA DMS-1	SIDE 2 FREON 12 RAW DATA DMS-1	SIDE 1 CO PPM BK6800-1	SIDE 2 CO PPM BK6800-1	SIDE 1 PAN PPM ECD-1	SIDE 2 PAN PPM ECD-1	SIDE 1 HCHO PPM CA
1 615	-165	-----	-----	-----	-----	-----	-----	-----
1 625	-155	-----	-----	2.19	2.19	-----	-----	-----
1 730	-90	283.1	-----	2.33	-----	-----	-----	-----
1 733	-87	-----	-----	-----	-----	-----	-----	0.013
1 735	-85	-----	-----	-----	-----	0.000	-----	-----
1 750	-70	-----	-----	-----	-----	-----	0.000	-----
1 815	-45	-----	-----	-----	2.32	-----	-----	-----
1 820	-40	-----	263.2	-----	-----	-----	-----	-----
1 821	-39	-----	-----	-----	-----	-----	-----	-----
1 905	5	-----	-----	2.35	-----	-----	-----	-----
1 915	15	-----	-----	-----	2.34	-----	-----	-----
1 935	35	-----	-----	2.47	-----	-----	-----	-----
1 945	45	-----	-----	-----	2.36	-----	-----	-----
1 1005	65	-----	-----	2.49	-----	-----	-----	-----
1 1015	75	-----	-----	-----	2.49	-----	-----	-----
1 1105	125	-----	-----	2.52	-----	-----	-----	-----
1 1115	135	-----	-----	-----	2.49	-----	-----	-----
1 1150	170	-----	-----	-----	-----	-----	-----	0.194
1 1205	185	-----	-----	2.75	-----	0.079	-----	-----
1 1212	192	-----	-----	-----	-----	-----	-----	-----
1 1215	195	-----	-----	-----	2.68	-----	0.086	-----
1 1305	245	-----	-----	2.82	-----	-----	-----	-----
1 1315	255	-----	-----	-----	2.80	-----	-----	-----
1 1405	305	-----	-----	2.97	-----	-----	-----	-----
1 1410	310	270.3	-----	-----	-----	-----	-----	-----
1 1415	315	-----	-----	-----	2.88	-----	-----	-----
1 1505	365	-----	-----	3.06	-----	-----	-----	-----
1 1515	375	-----	-----	-----	3.02	-----	-----	-----
1 1517	377	-----	-----	-----	-----	-----	-----	-----
1 1545	405	-----	-----	-----	-----	-----	-----	0.305
1 1605	425	-----	-----	3.10	-----	0.018	-----	-----
1 1607	427	-----	-----	-----	-----	-----	-----	-----
1 1615	435	-----	-----	-----	3.02	-----	0.047	-----
2 735	1355	262.7	-----	-----	-----	0.005	-----	-----
2 830	1410	-----	-----	-----	-----	-----	-----	0.369
2 835	1415	-----	-----	3.17	-----	-----	-----	-----
2 845	1425	-----	251.4	-----	3.16	-----	0.008	-----
2 852	1432	-----	-----	-----	-----	-----	-----	-----
2 905	1445	-----	-----	3.23	-----	-----	-----	-----
2 915	1455	-----	-----	-----	3.18	-----	-----	-----
2 1005	1505	-----	-----	3.43	-----	-----	-----	-----
2 1015	1515	-----	-----	-----	3.26	-----	-----	-----
2 1105	1565	-----	-----	3.04	-----	-----	-----	-----
2 1115	1575	-----	-----	-----	3.28	-----	-----	-----
2 1150	1610	-----	-----	-----	-----	-----	-----	0.317
2 1205	1625	-----	-----	3.37	-----	-----	-----	-----
2 1211	1631	-----	-----	-----	-----	-----	-----	-----
2 1215	1635	-----	-----	-----	3.31	-----	-----	-----
2 1305	1685	-----	-----	3.58	-----	-----	-----	-----
2 1315	1695	-----	-----	-----	3.43	-----	-----	-----
2 1405	1745	274.4	-----	3.53	-----	-----	-----	-----

----- NO DATA TAKEN

	SIDE 1 PAN PPM ECD-1	SIDE 2 PAN PPM ECD-1	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023
2						
0-1						
					0.	0.
					334.	
	0.000		0.013			
		0.000				
						501.
				0.013		
					1002.	
						2004.
					3.6E 04	
						7.3E 04
					5010.	
						8133.
					1169.	
						-334.
	0.079		0.194			
					5845.	
		0.086		0.134		
						-2505.
					1336.	
						2505.
					167.	
						-835.
					-1336.	
						1503.
			0.305			
	0.018				-835.	
		0.047		0.217		
						501.
	0.005					
			0.369			
		0.008				
				0.258		
					668.	
			0.317			0.
					167.	
				0.230		
						167.
					668.	
						-167.
					167.	

2

AFF- 42
 UNLEADED GASOLINE; VARIABLE FUEL
 1980, OCT 2-3

CLOCK	ELAPSED	SIDE 1 FREON 12	SIDE 2 FREON 12	SIDE 1 CO	SIDE 2 CO	SIDE 1 PAN	SIDE 2 PAN	SIDE 1 HCHO
TIME	TIME	RAW DATA	RAW DATA	PPM	PPM	PPM	PPM	PPM
BY HR.	(MIN)	DMS-1	DMS-1	BK6800-1	BK6800-1	ECD-1	ECD-1	CA
2 1415	1755	-----	-----	-----	3.48	-----	-----	-----
2 1450	1790	-----	-----	-----	-----	-----	-----	0.310
2 1505	1805	-----	-----	3.68	-----	0.012	-----	-----
2 1511	1811	-----	-----	-----	-----	-----	-----	-----
2 1515	1815	-----	250.4	-----	3.47	-----	0.010	-----

----- NO DATA TAKEN

DE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
CO	PAN	PAN	HCHO	HCHO	PART.024	PART.024
PM	PPM	PPM	PPM	PPM	PART/CC	PART/CC
800-1	ECD-1	ECD-1	CA	CA	TSI-023	TSI-023
.48	-----	-----	-----	-----	-----	0.
-----	-----	-----	0.310	-----	-----	-----
-----	0.012	-----	-----	-----	334.	-----
-----	-----	-----	-----	0.214	-----	-----
.47	-----	0.010	-----	-----	-----	334.

AFF- 42
UNLEADED GASOLINE; VARIABLE FUEL
1980, OCT 2-3

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.042 PART/CC TSI-023	SIDE 2 PART.042 PART/CC TSI-023	SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023	SIDE 1 PART.133 PART/CC TSI-023	SIDE 2 PART.133 PART/CC TSI-023	SIDE 1 PART.23 PART/CC TSI-023
1 625	-155	0.	0.	133.	133.	0.	0.	25.
1 730	-90	0.	-----	178.	-----	121.	-----	49.
1 815	-43	-----	87.	-----	133.	-----	120.	-----
1 905	5	87.	-----	355.	-----	169.	-----	86.
1 915	15	-----	261.	-----	533.	-----	289.	-----
1 935	35	7.0E 04	-----	1.2E 05	-----	1.8E 04	-----	1365.
1 945	45	-----	5.4E 04	-----	3.0E 04	-----	3061.	-----
1 1005	65	1.8E 04	-----	1.1E 05	-----	4.3E 04	-----	3063.
1 1015	75	-----	2.8E 04	-----	6.7E 04	-----	1.3E 04	-----
1 1105	125	435.	-----	5.5E 04	-----	4.8E 04	-----	4735.
1 1115	135	-----	1.1E 04	-----	4.2E 04	-----	2.8E 04	-----
1 1205	185	0.	-----	2.9E 04	-----	4.1E 04	-----	5264.
1 1215	195	-----	1653.	-----	2.6E 04	-----	2.7E 04	-----
1 1305	245	1740.	-----	1.4E 04	-----	3.4E 04	-----	5314.
1 1315	255	-----	174.	-----	1.4E 04	-----	2.3E 04	-----
1 1405	305	-783.	-----	8702.	-----	3.1E 04	-----	2792.
1 1415	315	-----	1.4E 04	-----	1332.	-----	1.9E 04	-----
1 1505	365	870.	-----	1.9E 04	-----	1.3E 04	-----	4551.
1 1515	375	-----	870.	-----	4795.	-----	1.5E 04	-----
1 1605	425	-783.	-----	3863.	-----	1.6E 04	-----	4034.
1 1615	435	-----	2088.	-----	2575.	-----	1.2E 04	-----
2 835	1415	-----	-----	-----	-----	-----	-----	-----
2 845	1425	-----	-----	-----	-----	-----	-----	-----
2 905	1445	-----	-----	-----	-----	-----	-----	-----
2 915	1455	-----	-----	-----	-----	-----	-----	-----
2 1005	1505	-----	-----	-----	-----	-----	-----	-----
2 1015	1515	-----	-----	-----	-----	-----	-----	-----
2 1105	1565	261.	-----	133.	-----	217.	-----	246.
2 1115	1575	-----	-87.	-----	222.	-----	241.	-----
2 1205	1625	261.	-----	89.	-----	217.	-----	148.
2 1215	1635	-----	435.	-----	-222.	-----	169.	-----
2 1305	1685	0.	-----	89.	-----	193.	-----	135.
2 1315	1695	-----	-348.	-----	-89.	-----	193.	-----
2 1405	1745	87.	-----	178.	-----	241.	-----	37.
2 1415	1755	-----	0.	-----	222.	-----	145.	-----
2 1505	1805	87.	-----	311.	-----	169.	-----	86.
2 1515	1815	-----	0.	-----	222.	-----	169.	-----

----- NO DATA TAKEN

SIDE 1 PART.133 PART/CC TSI-023	SIDE 2 PART.133 PART/CC TSI-023	SIDE 1 PART.237 PART/CC TSI-023	SIDE 2 PART.237 PART/CC TSI-023	SIDE 1 PART.422 PART/CC TSI-023	SIDE 2 PART.422 PART/CC TSI-023
0.	0.	25.	25.	7.	7.
121.	-----	49.	-----	7.	-----
-----	120.	-----	86.	-----	0.
169.	-----	86.	-----	0.	-----
-----	289.	-----	74.	-----	-7.
1.8E 04	-----	1365.	-----	140.	-----
-----	3061.	-----	295.	-----	7.
4.3E 04	-----	3063.	-----	287.	-----
-----	1.3E 04	-----	738.	-----	67.
4.8E 04	-----	4735.	-----	414.	-----
-----	2.8E 04	-----	2140.	-----	153.
4.1E 04	-----	5264.	-----	440.	-----
-----	2.7E 04	-----	2669.	-----	200.
3.4E 04	-----	5314.	-----	434.	-----
-----	2.3E 04	-----	2718.	-----	220.
3.1E 04	-----	2792.	-----	454.	-----
-----	1.9E 04	-----	2755.	-----	253.
1.3E 04	-----	4551.	-----	427.	-----
-----	1.5E 04	-----	2558.	-----	200.
1.6E 04	-----	4034.	-----	400.	-----
-----	1.2E 04	-----	2140.	-----	200.
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
217.	-----	246.	-----	33.	-----
-----	241.	-----	172.	-----	27.
217.	-----	148.	-----	33.	-----
-----	169.	-----	111.	-----	20.
193.	-----	135.	-----	53.	-----
-----	193.	-----	111.	-----	47.
241.	-----	37.	-----	7.	-----
-----	145.	-----	111.	-----	13.
169.	-----	86.	-----	20.	-----
-----	169.	-----	111.	-----	33.

AFF- 42
UNLEADED GASOLINE; VARIABLE FUEL
1980, OCT 2-3

CLOCK	ELAPSED	SIDE 1	SIDE 2
TIME	TIME	PART,750	PART,750
DY HR.	(MIN)	PART/CC	PART/CC
		TSI-023	TSI-023

1	625	-155	4.	4.
1	730	-90	0.	-----
1	815	-45	-----	0.
1	905	5	0.	-----
1	915	15	-----	25.
1	935	35	28.	-----
1	945	45	-----	11.
1	1005	65	46.	-----
1	1015	75	-----	4.
1	1105	125	84.	-----
1	1115	135	-----	25.
1	1205	185	70.	-----
1	1215	195	-----	7.
1	1305	245	67.	-----
1	1315	255	-----	39.
1	1405	305	70.	-----
1	1415	315	-----	28.
1	1505	365	67.	-----
1	1515	375	-----	11.
1	160	425	56.	-----
1	1615	435	-----	28.

2	835	1415	-----	-----
2	845	1425	-----	-----
2	905	1445	-----	-----
2	915	1455	-----	-----
2	1005	1505	-----	-----
2	1015	1515	-----	-----
2	1105	1565	7.	-----
2	1115	1575	-----	4.
2	1205	1625	11.	-----
2	1215	1635	-----	21.
2	1305	1685	14.	-----
2	1315	1695	-----	4.
2	1405	1745	11.	-----
2	1415	1755	-----	4.
2	1505	1805	14.	-----
2	1515	1815	-----	4.

----- NO DATA TAKEN

AFF- 43
UNLEADED GASOLINE; 4-DAY
1980, OCT 7-10

DAY 1 (OCT. 7)

0600: BAG FILLED WITH PURE AIR.
0610: WET BULB TEMP:6.6C; DRY BULB TEMP:16.2C; RH=22%
0715: 5 ML NO2 INJECTED
0717: 15 ML NO INJECTED
0720: 100 ML FREON INJECTED
0723: 740 MICROLITERS UNLEADED GASOLINE INJECTED
0900: UNCOVER BAG (T=0)
1610: SAMPLING ENDED FOR DAY; BAG NOT COVERED.

DAY 2 (OCT. 8)

0730: BAG HAS APPROXIMATELY 50 TO 60% AIR LEFT. WILL NOT REFILL.

DAY 3 (OCT. 9)

0700: COMPUTER DUMPED
0710: FIXED COMPUTER
0900: SUNNY, GETTING HOT.
0949-0959: INJECT 13 ML NO AT 200 ML N2/MIN WHILE FILLING WITH AIR
1000-1010: INJECT 4 ML NO2 AT 300 ML N2/MIN WHILE FILLING WITH AIR
1015: END FILL APPROXIMATELY 70% OF TOTAL VOLUME.
DILUTION FACTOR: 0.80

DAY 4 (OCT 10)

0730: BAG ~ 50% FULL
1510: SAMPLING ENDED, RUN OVER.

RESULTS	DAY 1	DAY 2	DAY 3	DAY 4
-----	-----	-----	-----	-----
AVG. T (DEG. C)	34 (+-6)	34 (+-5)	32 (+-5)	28 +-5)
AVG. UV (MW/CM2)	1.7 (+-0.6)	1.5 (+-0.7)	1.4 (+-0.6)	1.5 (+-0.6)

T=0 AT 900 PST

BAG NO. 18 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	30.9	6.3	DEG C
UV RAD	EPPLEY-2	1.53	0.61	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.293	PPM
NO2-UNC	B-NOX-1	0.121	PPM
THC	BK6800-1	32.60	PPMC

AFF- 43
UNLEADED GASOLINE; 4-DAY
1980; OCT 7-10

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
2100	PN-1	RM-121 POROPAK-N GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
2750	SE-52C-2	RM-121; 30M SE-52 QUARTZ CAP. GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4025	AF DMS	AF-LAB; DIMETHYLSULFOLANE GC; FID
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
4000	ECD-3	AF-LAB; 12" 5% CARBOWAX-600 GC; ECD
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
2000	ECD-1	RM-121; 12" 5% CARBOWAX-400 GC; ECD
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG

AFF- 43
UNLEADED GASOLINE; 4-DAY
1980, OCT 7-10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	THC PPMC BK6800-1	T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-
1 635	-145	0.000	0.000	0.000	0.000	1.90	16.6	-----
1 845	-15	0.000	0.293	0.121	0.432	32.60	22.3	-----
1 905	5	0.006	0.213	0.178	0.423	32.30	23.8	1.38
1 915	15	0.013	0.112	0.266	0.417	32.40	24.8	1.60
1 930	30	0.225	0.018	0.317	0.340	31.30	28.4	1.90
1 945	45	0.394	0.017	0.262	0.285	28.50	30.9	1.98
1 1005	65	0.483	0.018	0.233	0.256	27.90	33.0	2.05
1 1105	125	0.546	0.017	0.190	0.209	26.30	37.5	2.31
1 1205	185	0.583	0.019	0.158	0.177	25.50	40.0	2.50
1 1305	245	0.600	0.020	0.127	0.144	25.00	40.0	1.94
1 1405	305	0.583	0.021	0.103	0.126	23.20	39.5	1.30
1 1505	365	0.555	0.021	0.089	0.107	22.60	37.1	0.82
1 1605	425	0.528	0.021	0.076	0.095	23.70	34.1	0.41
2 805	1385	0.390	0.031	0.058	0.087	24.60	24.8	0.93
2 905	1445	0.364	0.031	0.063	0.092	24.30	28.5	1.49
2 1005	1505	0.351	0.023	0.063	0.083	23.60	33.4	1.87
2 1105	1565	0.345	0.018	0.052	0.070	22.70	36.5	2.27
2 1205	1625	-----	0.020	0.048	0.063	22.80	40.0	2.38
2 1305	1685	0.326	0.019	0.046	0.062	22.40	40.2	1.98
2 1405	1745	0.317	0.020	0.047	0.063	21.90	38.0	1.27
2 1505	1805	0.299	0.021	0.043	0.061	21.90	36.5	0.86
2 1605	1865	0.282	0.021	0.043	0.061	21.90	31.5	0.41
3 815	2835	0.220	0.021	0.037	0.053	23.30	20.0	0.75
3 1030	2970	0.071	0.042	0.381	0.441	16.40	27.0	1.83
3 1105	3005	0.203	0.022	0.371	0.403	15.90	28.5	1.94
3 1205	3065	0.461	0.020	0.300	0.323	14.90	31.1	2.09
3 1305	3125	0.637	0.020	0.241	0.268	14.20	33.0	1.79
3 1405	3185	0.678	0.019	0.208	0.231	14.00	34.4	1.41
3 1505	3245	0.664	0.021	0.190	0.212	13.80	32.2	0.86
3 1605	3305	0.634	0.021	0.170	0.193	13.90	28.8	0.37
4 805	4265	0.451	0.015	0.103	0.119	14.00	19.3	0.82
4 905	4325	0.433	0.015	0.107	0.122	14.10	21.8	1.41
4 1005	4385	0.427	0.017	0.111	0.128	14.10	26.6	1.90
4 1105	4445	0.426	0.017	0.109	0.123	13.60	28.7	2.09
4 1205	4505	0.434	0.017	0.108	0.123	13.40	29.6	2.27
4 1305	4565	0.441	0.017	0.103	0.120	13.10	33.5	1.71
4 1405	4625	0.442	0.019	0.099	0.118	12.80	32.5	1.27
4 1505	4685	0.432	0.018	0.096	0.111	12.80	31.3	0.82

----- NO DATA TAKEN

11 NOV 1981

PAGE 3

-UNC PM OX-1	THC PPMC BK6800-1	T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-2	CONDENS 10E3/CC CNC-143	#PART>.3 PART/CC CLIMET	#PART>.5 PART/CC CLIMET	#PART>1 PART/CC CLIMET
.000	1.90	16.6	-----	0.0	12.	2.	0.
.432	32.60	22.3	-----	0.8	8.	1.	0.
.423	32.30	23.8	1.38	1.9	8.	1.	0.
.417	32.40	24.8	1.60	60.0	7.	1.	0.
.340	31.30	28.4	1.90	110.0	6.	1.	0.
.285	28.50	30.9	1.98	92.0	6.	1.	0.
.256	27.90	33.0	2.05	79.0	6.	1.	0.
.209	26.30	37.5	2.31	54.0	5.	1.	0.
.177	25.50	40.0	2.50	36.0	5.	0.	0.
.144	25.00	40.0	1.94	27.0	9.	1.	0.
.126	23.20	39.5	1.30	20.7	16.	1.	0.
.107	22.60	37.1	0.82	15.2	21.	1.	0.
.095	23.70	34.1	0.41	11.7	27.	1.	0.
.087	24.60	24.8	0.93	0.4	38.	1.	0.
.092	24.30	28.5	1.49	0.6	34.	1.	0.
.083	23.60	33.4	1.87	1.1	38.	1.	0.
.070	22.70	36.5	2.27	0.6	42.	1.	0.
.063	22.80	40.0	2.38	0.6	57.	1.	0.
.062	22.40	40.2	1.98	0.3	67.	1.	0.
.063	21.90	38.0	1.27	0.5	84.	3.	0.
.061	21.90	36.5	0.86	0.6	89.	3.	0.
.061	21.90	31.5	0.41	0.5	89.	3.	0.
.053	23.30	20.0	0.75	0.0	15.	1.	0.
.441	16.40	27.0	1.83	0.4	15.	1.	0.
.403	15.90	28.5	1.94	3.5	13.	1.	0.
.323	14.90	31.1	2.09	7.2	15.	1.	0.
.268	14.20	33.0	1.79	5.9	13.	1.	0.
.231	14.00	34.4	1.41	4.6	12.	1.	0.
.212	13.80	32.2	0.86	3.6	12.	1.	0.
.193	13.90	28.8	0.37	3.0	12.	1.	0.
.119	14.00	19.3	0.82	0.4	10.	1.	0.
.122	14.10	21.8	1.41	0.6	12.	2.	0.
.128	14.10	26.6	1.90	0.5	14.	1.	0.
.123	13.60	28.7	2.09	0.6	17.	1.	0.
.127	13.40	29.6	2.27	0.5	22.	1.	0.
.120	13.10	33.5	1.71	0.6	26.	2.	0.
.118	12.80	32.5	1.27	0.5	27.	2.	0.
.111	12.80	31.3	0.82	0.5	24.	2.	0.

AFF- 43
UNLEADED GASOLINE; 4-DAY
1980, OCT 7-10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	BSCAT 10-4 M-1 MRI-388	AER.V UM3/CC TSI-023	AER.N PART/CC TSI-023	AER.S UM2/CC TSI-023	METHANE PPM PN-1	N-C4 PPM DMS-1	CS-ISO PPM SE-520
1 635	-145	0.8	2.	687.	32.	-----	-----	-----
1 636	-144	-----	-----	-----	-----	2.69	0.0036	-----
1 755	-65	-----	-----	-----	-----	2.68	0.0748	0.034
1 845	-15	0.8	1.	683.	29.	-----	-----	-----
1 905	5	0.8	2.	80.	31.	-----	-----	-----
1 915	15	0.7	2.	1258.	36.	-----	-----	0.024
1 930	30	0.8	18.	2.4E 05	1533.	-----	-----	-----
1 945	45	1.0	64.	2.8E 05	3277.	-----	-----	-----
1 1005	65	1.6	110.	1.4E 05	4711.	-----	-----	0.025
1 1105	125	2.4	135.	1.0E 05	4660.	-----	-----	0.023
1 1204	184	-----	-----	-----	-----	-----	-----	0.018
1 1205	185	2.9	111.	6.8E 04	3654.	-----	-----	-----
1 1305	245	3.9	101.	5.1E 04	3193.	-----	-----	0.022
1 1405	305	4.1	98.	4.0E 04	2692.	-----	-----	0.022
1 1505	365	3.9	86.	2.9E 04	2265.	2.68	0.0697	0.020
1 1605	425	3.8	78.	2.1E 04	1918.	-----	-----	-----
2 805	1385	1.3	10.	1.4E 04	294.	2.69	0.0705	0.022
2 905	1445	1.3	13.	1.1E 04	338.	-----	-----	0.021
2 1004	1504	-----	-----	-----	-----	-----	-----	0.023
2 1005	1505	1.3	12.	7197.	280.	-----	-----	-----
2 1105	1565	1.2	8.	5034.	182.	-----	-----	0.020
2 1205	1625	1.3	10.	3327.	189.	-----	-----	0.020
2 1305	1685	1.1	7.	1868.	128.	-----	-----	0.020
2 1405	1745	1.4	9.	2749.	171.	-----	-----	0.020
2 1505	1805	1.3	14.	4520.	226.	2.65	0.0666	0.022
2 1605	1865	1.3	12.	3875.	222.	-----	-----	-----
3 711	2771	-----	-----	-----	-----	2.70	0.0625	0.023
3 815	2835	0.7	4.	3167.	95.	-----	-----	-----
3 1028	2968	-----	-----	-----	-----	2.83	0.0494	0.016
3 1030	2970	0.7	5.	3406.	109.	-----	-----	-----
3 1105	3005	0.8	7.	6038.	140.	-----	-----	-----
3 1205	3065	1.2	17.	1.3E 04	478.	-----	-----	-----
3 1305	3125	1.4	21.	1.1E 04	616.	-----	-----	0.014
3 1405	3185	1.5	24.	9774.	603.	-----	-----	0.012
3 1505	3245	1.5	19.	8592.	524.	2.77	0.0392	0.016
3 1605	3305	1.7	18.	9184.	456.	-----	-----	-----
4 805	4265	0.7	6.	5337.	148.	2.82	0.0455	0.015
4 905	4325	0.8	5.	5739.	137.	-----	-----	0.014
4 1005	4385	0.9	5.	6070.	146.	-----	-----	0.013
4 1105	4445	0.8	4.	5224.	119.	-----	-----	0.013
4 1205	4505	0.8	5.	4291.	140.	-----	-----	0.012
4 1305	4565	1.0	10.	3887.	194.	-----	-----	0.010
4 1405	4625	1.0	8.	3801.	189.	-----	-----	0.013
4 1505	4685	0.9	7.	5190.	188.	2.78	0.0411	0.013

----- NO DATA TAKEN

S 2/CC -023	METHANE PPM PN-1	N-C4 PPM DMS-1	C5-ISOMERS PPM SE-52C-2	I-C5 PPM DMS-1	N-C5 PPM DMS-1	N-C6 PPM DMS-1	N-C6 PPM SE-52C-2
32.	-----	-----	-----	-----	-----	-----	-----
---	2.69	0.0036	-----	0.0010	0.0004	0.0000	-----
---	2.68	0.0748	0.0345	0.3866	0.0917	0.0770	0.0240
29.	-----	-----	-----	-----	-----	-----	-----
31.	-----	-----	-----	-----	-----	-----	-----
36.	-----	-----	0.0245	-----	-----	-----	0.0212
33.	-----	-----	-----	-----	-----	-----	-----
77.	-----	-----	-----	-----	-----	-----	-----
11.	-----	-----	0.0258	-----	-----	-----	0.0202
30.	-----	-----	0.0233	-----	-----	-----	0.0209
---	-----	-----	0.0181	-----	-----	-----	0.0195
54.	-----	-----	-----	-----	-----	-----	-----
73.	-----	-----	0.0226	-----	-----	-----	0.0201
92.	-----	-----	0.0222	-----	-----	-----	0.0193
65.	2.68	0.0697	0.0205	0.3423	0.0992	0.0662	0.0204
18.	-----	-----	-----	-----	-----	-----	-----
94.	2.69	0.0705	0.0223	0.3393	0.0787	0.0662	0.0209
38.	-----	-----	0.0214	-----	-----	-----	0.0182
---	-----	-----	0.0236	-----	-----	-----	0.0201
30.	-----	-----	-----	-----	-----	-----	-----
82.	-----	-----	0.0208	-----	-----	-----	0.0168
89.	-----	-----	0.0204	-----	-----	-----	0.0170
28.	-----	-----	0.0205	-----	-----	-----	0.0172
71.	-----	-----	0.0207	-----	-----	-----	0.0164
26.	2.65	0.0666	0.0226	0.3277	0.0757	0.0613	0.0186
22.	-----	-----	-----	-----	-----	-----	-----
---	2.70	0.0625	0.0234	0.3054	0.0703	0.0577	0.0198
95.	-----	-----	-----	-----	-----	-----	-----
---	2.83	0.0494	0.0164	0.2331	0.0537	0.0433	0.0131
09.	-----	-----	-----	-----	-----	-----	-----
40.	-----	-----	-----	-----	-----	-----	-----
78.	-----	-----	-----	-----	-----	-----	-----
16.	-----	-----	0.0142	-----	-----	-----	0.0098
03.	-----	-----	0.0120	-----	-----	-----	0.0092
24.	2.77	0.0392	0.0167	0.1836	0.0824	0.0345	0.0179
56.	-----	-----	-----	-----	-----	-----	-----
48.	2.82	0.0455	0.0154	0.2086	0.0485	0.0381	0.0120
37.	-----	-----	0.0143	-----	-----	-----	0.0099
46.	-----	-----	0.0136	-----	-----	-----	0.0098
19.	-----	-----	0.0131	-----	-----	-----	0.0095
40.	-----	-----	0.0123	-----	-----	-----	0.0092
94.	-----	-----	0.0102	-----	-----	-----	0.0090
89.	-----	-----	0.0136	-----	-----	-----	0.0089
88.	2.78	0.0411	0.0134	0.1815	0.0425	0.0322	0.0088

2

AFF- 43
UNLEADED GASOLINE; 4-DAY
1980, OCT 7-10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	N-C7 PPM SE-52C-2	N-C8 PPM SE-52C-2	BENZENE PPM 10'C-600	TOLUENE PPM SE-52C-2	TOLUENE PPM 10'C-600	O-XYL PPM SE-52C-2	O-XYL PPM 10'C-600
1 636	-144	-----	-----	0.0003	-----	-----	-----	-----
1 755	-65	0.0193	0.0822	-----	0.1476	-----	0.0415	-----
1 843	-17	-----	-----	0.0518	-----	0.3940	-----	0.102
1 915	15	0.0178	0.0782	-----	0.1396	-----	0.0403	-----
1 1005	65	0.0135	0.0577	-----	0.1170	-----	0.0321	-----
1 1105	125	0.0142	0.0596	-----	0.1219	-----	0.0325	-----
1 1204	194	0.0133	0.0565	-----	0.1161	-----	0.0306	-----
1 1305	245	0.0136	0.0562	-----	0.1178	-----	0.0303	-----
1 1405	305	0.0132	0.0550	-----	0.1162	-----	0.0294	-----
1 1505	365	0.0141	0.0566	0.0528	0.1211	0.3380	0.0295	0.072
2 805	1385	0.0136	0.0530	0.0528	0.1173	0.3388	0.0280	0.071
2 905	1445	0.0125	0.0508	-----	0.1083	-----	0.0261	-----
2 1004	1504	0.0138	0.0554	-----	0.1184	-----	0.0280	-----
2 1105	1565	0.0116	0.0484	-----	0.1031	-----	0.0247	-----
2 1205	1625	0.0120	0.0492	-----	0.1059	-----	0.0252	-----
2 1305	1685	0.0121	0.0491	-----	0.1070	-----	0.0251	-----
2 1405	1745	0.0115	0.0463	-----	0.1019	-----	0.0238	-----
2 1505	1805	0.0127	0.0505	0.0548	0.1108	0.3152	0.0247	0.062
3 711	2771	0.0127	0.0474	0.0528	0.1130	0.3064	0.0254	0.056
3 1028	2968	0.0082	0.0327	0.0375	0.0793	0.2189	0.0168	0.042
3 1205	3065	-----	-----	-----	-----	-----	-----	-----
3 1305	3125	0.0066	0.0256	-----	0.0600	-----	0.0118	-----
3 1405	3185	0.0195	0.0237	-----	0.0568	-----	0.0109	-----
3 1505	3245	0.0071	0.0266	0.0375	0.0638	0.1865	0.0119	0.028
4 805	4265	0.0076	0.0289	0.0365	0.0686	0.1795	0.0121	0.013
4 905	4325	0.0066	0.0251	-----	0.0605	-----	0.0110	-----
4 1005	4385	0.0065	0.0245	-----	0.0593	-----	0.0107	-----
4 1105	4445	0.0063	0.0234	-----	0.0580	-----	0.0102	-----
4 1205	4505	0.0062	0.0237	-----	0.0576	-----	0.0101	-----
4 1305	4565	0.0060	0.0225	-----	0.0552	-----	0.0095	-----
4 1405	4625	0.0059	0.0219	-----	0.0548	-----	0.0093	-----
4 1505	4685	0.0062	0.0226	0.0406	0.0571	0.1681	0.0094	0.011

----- NO DATA TAKEN

NE	TOLUENE PPM 10'C-600	O-XYL PPM SE-52C-2	O-XYL PPM 10'C-600	C2BENZ PPM SE-52C-2	M+P-XYL PPM 10'C-600	124TMEBZ RAW DATA SE-52C-2
76	-----	-----	-----	-----	-----	-----
76	0.3940	0.0415	-----	0.0276	-----	1.6E 04
76	-----	-----	0.1029	-----	0.6187	-----
70	-----	0.0403	-----	0.0267	-----	1.5E 04
70	-----	0.0321	-----	0.0226	-----	1.0E 04
79	-----	0.0325	-----	0.0234	-----	9263.
79	-----	0.0306	-----	0.0224	-----	7993.
78	-----	0.0303	-----	0.0226	-----	7199.
78	-----	0.0294	-----	0.0222	-----	6551.
71	0.3380	0.0295	0.0726	0.0228	0.3619	6495.
73	0.3388	0.0280	0.0716	0.0216	0.3430	5509.
73	-----	0.0261	-----	0.0206	-----	5069.
74	-----	0.0280	-----	0.0223	-----	5290.
71	-----	0.0247	-----	0.0196	-----	4588.
79	-----	0.0252	-----	0.0203	-----	4555.
70	-----	0.0251	-----	0.0205	-----	4483.
79	-----	0.0238	-----	0.0194	-----	4095.
78	0.3152	0.0247	0.0625	0.0207	0.2841	4111.
70	0.3064	0.0254	0.0565	0.0212	0.2588	4029.
73	0.2189	0.0168	0.0424	0.0146	0.1747	2273.
70	-----	-----	-----	-----	-----	-----
78	-----	0.0118	-----	0.0112	-----	2024.
78	-----	0.0109	-----	0.0106	-----	1940.
78	0.1865	0.0119	0.0287	0.0119	0.1052	2812.
76	0.1795	0.0121	0.0131	0.0124	0.0468	2597.
76	-----	0.0110	-----	0.0112	-----	1582.
73	-----	0.0107	-----	0.0110	-----	1635.
70	-----	0.0102	-----	0.0108	-----	1740.
76	-----	0.0101	-----	0.0108	-----	1564.
76	-----	0.0095	-----	0.0102	-----	1952.
78	-----	0.0093	-----	0.0102	-----	1628.
71	0.1681	0.0094	0.0117	0.0105	0.0376	2141.

AFF- 43
UNLEADED GASOLINE; 4-DAY
1980, OCT 7-10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	FREON 12 RAW DATA AF DMS	FREON 12 RAW DATA DMS-1	CO PPM BK6800-1	PAN PPM ECD-1	HCHO PPM CA	PART.024 PART/CC TSI-023	PART.04 PART/CC TSI-023
1 635	-145	-----	-----	2.91	-----	-----	167.	174.
1 636	-144	-----	-----	-----	-----	-----	-----	-----
1 736	-84	-----	-----	-----	0.000	-----	-----	-----
1 755	-65	-----	142.3	-----	-----	-----	-----	-----
1 840	-20	-----	-----	-----	-----	0.027	-----	-----
1 845	-15	1.280	-----	2.95	-----	-----	167.	87.
1 855	-5	-----	-----	-----	0.000	-----	-----	-----
1 905	5	-----	-----	2.89	-----	-----	-334.	0.
1 915	15	-----	-----	2.97	-----	-----	501.	174.
1 930	30	-----	-----	2.96	-----	-----	1.2E 05	8.9E 0
1 945	45	-----	-----	3.11	-----	-----	5.8E 04	1.5E 0
1 1005	65	1.310	-----	3.17	-----	-----	=31396	3.0E 0
1 1105	125	-----	-----	3.20	-----	-----	2672.	696.
1 1200	180	-----	-----	-----	-----	0.207	-----	-----
1 1205	185	1.290	-----	3.29	-----	-----	-167.	-1566.
1 1305	245	-----	-----	3.43	-----	-----	334.	522.
1 1405	305	1.280	-----	3.48	-----	-----	4509.	-1479.
1 1505	365	-----	137.7	3.56	0.041	-----	334.	609.
1 1600	420	-----	-----	-----	-----	0.324	-----	-----
1 1605	425	1.290	-----	3.56	-----	-----	-835.	1131.
2 805	1385	1.300	138.2	3.78	0.015	-----	7181.	2001.
2 810	1390	-----	-----	-----	-----	0.355	-----	-----
2 905	1445	-----	-----	3.97	-----	-----	4008.	1827.
2 1005	1505	1.270	-----	3.91	-----	-----	2672.	783.
2 1105	1565	-----	-----	3.51	-----	-----	1837.	870.
2 1200	1620	-----	-----	-----	-----	0.318	-----	-----
2 1205	1625	1.270	-----	3.91	-----	-----	668.	870.
2 1305	1685	-----	-----	4.18	-----	-----	334.	348.
2 1405	1745	1.280	-----	4.05	-----	-----	334.	609.
2 1505	1805	-----	136.7	4.18	0.008	-----	835.	1653.
2 1600	1860	-----	-----	-----	-----	0.309	-----	-----
2 1605	1865	1.280	-----	4.08	-----	-----	668.	609.
3 711	2771	-----	126.5	-----	0.003	-----	-----	-----
3 750	2810	-----	-----	-----	-----	0.341	-----	-----
3 815	2835	1.270	-----	4.16	-----	-----	1169.	435.
3 1028	2968	-----	100.9	-----	0.018	-----	-----	-----
3 1030	2970	0.902	-----	4.38	-----	-----	1503.	348.
3 1105	3005	-----	-----	4.44	-----	-----	3006.	1131.
3 1110	3010	-----	-----	-----	-----	0.205	-----	-----
3 1200	3060	-----	-----	-----	-----	0.219	-----	-----
3 1205	3065	0.902	-----	4.44	-----	-----	3006.	1392.
3 1305	3125	-----	-----	4.46	-----	-----	1670.	261.
3 1405	3185	-----	-----	4.59	-----	-----	1837.	435.
3 1505	3245	-----	86.27	4.67	0.088	-----	1169.	783.
3 1600	3300	-----	-----	-----	-----	0.265	-----	-----
3 1605	3305	0.882	-----	4.52	-----	-----	2839.	870.
4 800	4260	-----	-----	-----	-----	0.312	-----	-----
4 805	4265	0.876	98.30	4.63	0.054	-----	2004.	1044.
4 905	4325	-----	-----	4.67	-----	-----	2672.	783.
4 1005	4385	0.890	-----	4.81	-----	-----	2672.	1131.

----- NO DATA TAKEN

N M -1	HCHO PPM CA	PART.024 PART/CC TSI-023	PART.042 PART/CC TSI-023	PART.075 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART.237 PART/CC TSI-023	PART.422 PART/CC TSI-023
---	-----	167.	174.	133.	169.	37.	0.
000	-----	-----	-----	-----	-----	-----	-----
---	0.027	-----	-----	-----	-----	-----	-----
000	-----	167.	87.	222.	145.	49.	13.
---	-----	-334.	0.	222.	120.	61.	7.
---	-----	501.	174.	355.	169.	49.	7.
---	-----	1.2E 05	8.9E 04	3.2E 04	3615.	246.	20.
---	-----	5.8E 04	1.5E 05	5.2E 04	2.0E 04	1156.	140.
---	-----	=31396	3.0E 04	1.0E 05	3.7E 04	2558.	253.
---	-----	2672.	696.	5.0E 04	4.6E 04	4969.	400.
---	0.207	-----	-----	-----	-----	-----	-----
---	-----	-167.	-1566.	2.6E 04	4.0E 04	3493.	414.
---	-----	334.	522.	1.3E 04	3.1E 04	5277.	460.
---	-----	4509.	-1479.	8303.	2.3E 04	5129.	440.
041	-----	334.	609.	4795.	1.8E 04	4563.	420.
---	0.324	-----	-----	-----	-----	-----	-----
---	-----	-835.	1131.	2309.	1.3E 04	4465.	447.
015	-----	7181.	2001.	2309.	1663.	529.	67.
---	0.355	-----	-----	-----	-----	-----	-----
---	-----	4008.	1827.	2886.	1880.	590.	53.
---	-----	2672.	783.	1643.	1566.	418.	100.
---	-----	1837.	870.	1066.	819.	381.	53.
---	0.318	-----	-----	-----	-----	-----	-----
---	-----	668.	870.	622.	699.	381.	73.
---	-----	334.	348.	444.	410.	258.	67.
---	-----	334.	609.	710.	699.	332.	47.
008	-----	835.	1653.	755.	868.	308.	67.
---	0.309	-----	-----	-----	-----	-----	-----
---	-----	668.	609.	1243.	940.	320.	67.
003	-----	-----	-----	-----	-----	-----	-----
---	0.341	-----	-----	-----	-----	-----	-----
---	-----	1169.	435.	844.	554.	135.	27.
018	-----	-----	-----	-----	-----	-----	-----
---	-----	1503.	348.	710.	651.	160.	27.
---	-----	3006.	1131.	977.	699.	185.	27.
---	0.205	-----	-----	-----	-----	-----	-----
---	0.219	-----	-----	-----	-----	-----	-----
---	-----	3006.	1392.	4795.	3495.	627.	80.
---	-----	1670.	261.	2930.	5302.	1021.	120.
---	-----	1837.	435.	1643.	4531.	1181.	127.
088	-----	1169.	783.	1554.	3832.	1107.	147.
---	0.265	-----	-----	-----	-----	-----	-----
---	-----	2839.	870.	1376.	3037.	935.	113.
---	0.312	-----	-----	-----	-----	-----	-----
054	-----	2004.	1044.	1199.	843.	209.	27.
---	-----	2672.	783.	1243.	795.	209.	33.
---	-----	2672.	1131.	1066.	916.	246.	40.

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AFF- 43
 UNLEADED GASOLINE; 4-DAY
 1980, OCT 7-10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	FREON 12 RAW DATA AF DMS	FREON 12 RAW DATA DMS-1	CO PPM BK6800-1	PAN PPM ECD-1	HCHO PPM CA	PART.024 PART/CC TSI-023	PART.0 PART/C TSI-02
4 1105	4445	-----	-----	4.88	-----	-----	2672.	783.
4 1200	4500	-----	-----	-----	-----	0.304	-----	-----
4 1205	4505	0.878	-----	4.84	-----	-----	1837.	609.
4 1305	4565	-----	-----	4.89	-----	-----	835.	783.
4 1405	4625	-----	-----	4.95	-----	-----	835.	174.
4 1500	4680	-----	-----	-----	-----	0.288	-----	-----
4 1505	4685	0.888	92.42	5.01	0.021	-----	1670.	435.

----- NO DATA TAKEN

11 NOV 1981

PAGE 7

HCHO	PART.024	PART.042	PART.075	PART.133	PART.237	PART.422
PPM	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
CA	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
-----	2672.	783.	844.	699.	197.	27.
0.304	-----	-----	-----	-----	-----	-----
-----	1837.	609.	666.	843.	295.	40.
-----	835.	783.	888.	1036.	271.	53.
-----	835.	174.	1199.	1205.	344.	33.
0.288	-----	-----	-----	-----	-----	-----
-----	1670.	435.	1510.	1205.	320.	47.

2

AFF- 43
UNLEADED GASOLINE; 4-DAY
1980, OCT 7-10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	PART.750 PART/CC TSI-023
1 635	-145	7.
1 845	-15	0.
1 905	5	4.
1 915	15	4.
1 930	30	0.
1 945	45	39.
1 1005	65	56.
1 1105	125	81.
1 1205	185	70.
1 1305	245	25.
1 1405	305	67.
1 1505	365	63.
1 1605	425	56.
2 805	1385	4.
2 905	1445	18.
2 1005	1505	14.
2 1105	1565	7.
2 1205	1625	14.
2 1305	1685	7.
2 1405	1745	18.
2 1505	1805	35.
2 1605	1865	28.
3 815	2835	4.
3 1030	2970	7.
3 1105	3005	14.
3 1205	3065	18.
3 1305	3125	11.
3 1405	3185	21.
3 1505	3245	0.
3 1605	3305	14.
4 805	4265	11.
4 905	4325	4.
4 1005	4385	0.
4 1105	4445	4.
4 1205	4505	0.
4 1305	4565	21.
4 1405	4625	11.
4 1505	4685	4.

----- NO DATA TAKEN

AFF- 44
UNLEADED GAS VS. N-BUTANE
1980, OCT. 14

530: FILL STARTED
630: FILL ENDED
640: DRY BULB TEMPERATURE 16.2C WET BULB TEMP 5.9C RH=19%
703: 5 ML NO2 INJECTED
705: 16 ML NO INJECTED
715: DIVIDE BAG
735: INJECT 125 ML N-BUTANE INTO SIDE B
812-827: 370 MICROLITERS UNLEADED GAS INJECTED INTO SIDE A.
900: UNCOVER BAG (T=0)
925: WEATHER- SOMEWHAT CLOUDY
1200: WIND IS GETTING STRONG.
1210: PUT ON TEFLON COVER.
1520: RUN OVER.

T=0 AT 900 PST

BAG NO. 18 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	20.9	2.6	DEG C	SIDE 1
T	DORIC-1	21.7	3.4	DEG C	SIDE 2
UV RAD	EPPLEY-2	1.58	0.65	MW/CM2	

ID	INST.	INITIAL CONC.	UNITS	
NO	B-NOX-1	0.367	PPM	SIDE 1
NO	B-NOX-1	0.373	PPM	SIDE 2
NO2-UNC	B-NOX-1	0.140	PPM	SIDE 1
NO2-UNC	B-NOX-1	0.133	PPM	SIDE 2
THC	BK6800-1	36.90	PPMC	SIDE 1
THC	BK6800-1	37.60	PPMC	SIDE 2
N-C4	DMS-1	7.1650	PPM	SIDE 2

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
2750	SE-52C-2	RM-121; 30M SE-52 QUARTZ CAP. GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART, CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG

AFF- 44
UNLEADED GAS VS. N-BUTANE
1980, OCT. 14

CLOCK TIME DY HR.		ELAPSED TIME (MIN)	SIDE 1 OZONE PPM D-1790	SIDE 2 OZONE PPM D-1790	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1
1	650	-130	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1	750	-70	-----	-0.001	-----	0.373	-----	0.133	-----
1	850	-10	0.001	-----	0.367	-----	0.140	-----	0.504
1	905	5	0.010	-----	0.223	-----	0.236	-----	0.500
1	915	15	-----	0.000	-----	0.357	-----	0.153	-----
1	935	35	0.199	-----	0.016	-----	0.369	-----	0.388
1	945	45	-----	-0.001	-----	0.337	-----	0.172	-----
1	1005	65	0.414	-----	0.012	-----	0.283	-----	0.302
1	1015	75	-----	0.000	-----	0.311	-----	0.202	-----
1	1105	125	0.528	-----	0.012	-----	0.232	-----	0.248
1	1115	135	-----	0.000	-----	0.263	-----	0.239	-----
1	1205	185	0.496	-----	0.013	-----	0.231	-----	0.249
1	1215	195	-----	0.000	-----	0.232	-----	0.264	-----
1	1305	245	0.464	-----	0.015	-----	0.234	-----	0.246
1	1315	255	-----	0.000	-----	0.217	-----	0.281	-----
1	1405	305	0.450	-----	0.015	-----	0.232	-----	0.251
1	1415	315	-----	0.004	-----	0.191	-----	0.307	-----
1	1505	365	0.435	-----	0.019	-----	0.232	-----	0.250
1	1515	375	-----	-0.001	-----	0.172	-----	0.322	-----

----- NO DATA TAKEN

	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1
0	0.000	0.000	0.000	0.000	0.66	0.66
3	-----	0.133	-----	0.512	-----	37.60
-	0.140	-----	0.504	-----	36.90	-----
-	0.236	-----	0.500	-----	36.70	-----
7	-----	0.153	-----	0.512	-----	37.50
-	0.369	-----	0.388	-----	34.20	-----
7	-----	0.172	-----	0.510	-----	37.30
-	0.283	-----	0.302	-----	32.80	-----
1	-----	0.202	-----	0.514	-----	37.40
-	0.232	-----	0.248	-----	30.90	-----
3	-----	0.239	-----	0.506	-----	37.40
-	0.231	-----	0.249	-----	30.60	-----
2	-----	0.264	-----	0.504	-----	37.10
-	0.234	-----	0.246	-----	30.40	-----
7	-----	0.281	-----	0.506	-----	36.90
-	0.232	-----	0.251	-----	30.20	-----
1	-----	0.307	-----	0.506	-----	36.80
-	0.232	-----	0.250	-----	29.80	-----
2	-----	0.322	-----	0.500	-----	37.00

AFF- 44
UNLEADED GAS VS. N-BUTANE
1980, OCT. 14

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 N-C4 PPM DMS-1	SIDE 2 N-C4 PPM SE-52C-2	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-2	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE CONDEN 10E3/CC CNC-14
1 620	-160	0.0016	-----	-----	-----	-----	-----	-----
1 650	-130	-----	0.0000	15.3	15.3	-----	0.2	0.2
1 750	-70	-----	6.300	-----	16.4	-----	-----	0.4
1 845	-15	0.0880	-----	-----	-----	-----	-----	-----
1 850	-10	-----	-----	19.3	-----	-----	0.3	-----
1 905	5	-----	-----	20.6	-----	1.68	30.0	-----
1 915	15	-----	6.410	-----	20.6	0.89	-----	0.0
1 935	35	-----	-----	19.5	-----	1.41	96.0	-----
1 945	45	-----	6.400	-----	20.9	1.87	-----	0.0
1 1005	65	-----	-----	20.6	-----	2.24	79.0	-----
1 1015	75	-----	6.400	-----	24.0	2.54	-----	0.0
1 1105	125	-----	-----	23.8	-----	2.98	57.0	-----
1 1115	135	-----	6.400	-----	25.4	2.05	-----	0.0
1 1205	185	-----	-----	21.2	-----	1.68	40.0	-----
1 1215	195	-----	6.290	-----	23.5	1.30	-----	0.0
1 1305	245	-----	-----	22.1	-----	1.19	29.0	-----
1 1315	255	-----	6.330	-----	23.4	1.27	-----	0.0
1 1405	305	-----	-----	24.3	-----	1.49	21.8	-----
1 1415	315	-----	6.420	-----	24.8	1.38	-----	0.0
1 1505	365	0.0757	-----	22.8	-----	0.75	17.0	-----
1 1515	375	-----	6.410	-----	22.4	0.56	-----	0.0

----- NO DATA TAKEN

DE 2 T NEG C RIC-1	UV RAD MW/CM2 EPPLEY-2	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET
5.3	-----	0.2	0.2	2.	2.	0.	0.
6.4	-----	-----	0.4	-----	1.	-----	0.
-----	-----	0.3	-----	1.	-----	0.	-----
-----	1.68	30.0	-----	0.	-----	0.	-----
20.6	0.89	-----	0.0	-----	1.	-----	0.
-----	1.41	96.0	-----	0.	-----	0.	-----
20.9	1.87	-----	0.0	-----	1.	-----	0.
-----	2.24	79.0	-----	1.	-----	0.	-----
24.0	2.54	-----	0.0	-----	1.	-----	0.
-----	2.98	57.0	-----	5.	-----	0.	-----
25.4	2.05	-----	0.0	-----	1.	-----	0.
-----	1.68	40.0	-----	37.	-----	0.	-----
23.5	1.30	-----	0.0	-----	1.	-----	0.
-----	1.19	29.0	-----	63.	-----	0.	-----
23.4	1.27	-----	0.0	-----	1.	-----	0.
-----	1.49	21.8	-----	65.	-----	0.	-----
24.8	1.38	-----	0.0	-----	0.	-----	0.
-----	0.75	17.0	-----	72.	-----	0.	-----
22.4	0.56	-----	0.0	-----	0.	-----	0.

2

AFF- 44
UNLEADED GAS VS. N-BUTANE
1980, OCT. 14

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET	SIDE 1 BSCAT 10-4 M-1 MRI-388	SIDE 2 BSCAT 10-4 M-1 MRI-388	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UM3/CC TSI-023	SIDE 1 AER.N PART/CC TSI-023
1 650	-130	0.	0.	0.3	0.3	2.	2.	1916.
1 750	-70	-----	0.	-----	0.3	-----	1.	-----
1 850	-10	0.	-----	0.3	-----	1.	-----	2763.
1 905	5	0.	-----	0.3	-----	0.	-----	1594.
1 915	15	-----	0.	-----	0.3	-----	2.	-----
1 935	35	0.	-----	0.3	-----	37.	-----	1.8E 0
1 945	45	-----	0.	-----	0.2	-----	1.	-----
1 1005	65	0.	-----	2.2	-----	134.	-----	1.3E 0
1 1015	75	-----	0.	-----	0.2	-----	2.	-----
1 1105	125	0.	-----	5.8	-----	179.	-----	9.7E 0
1 1115	135	-----	0.	-----	0.2	-----	1.	-----
1 1205	185	0.	-----	6.7	-----	168.	-----	6.0E 0
1 1215	195	-----	0.	-----	0.3	-----	4.	-----
1 1305	245	0.	-----	6.5	-----	145.	-----	4.7E 0
1 1315	255	-----	0.	-----	0.2	-----	4.	-----
1 1405	305	0.	-----	5.7	-----	118.	-----	3.6E 0
1 1415	315	-----	0.	-----	0.2	-----	1.	-----
1 1505	365	0.	-----	5.1	-----	92.	-----	2.8E 0
1 1515	375	-----	0.	-----	0.2	-----	2.	-----

----- NO DATA TAKEN

DE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
EAT	AER.V	AER.V	AER.N	AER.N	AER.S	AER.S
M-1	UM3/CC	UM3/CC	PART/CC	PART/CC	UM2/CC	UM2/CC
-388	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
0.3	2.	2.	1916.	1916.	34.	34.
0.3	-----	1.	-----	2325.	-----	35.
-----	1.	-----	2763.	-----	31.	-----
-----	0.	-----	1594.	-----	20.	-----
0.3	-----	2.	-----	2399.	-----	44.
-----	37.	-----	1.8E 05	-----	2099.	-----
0.2	-----	1.	-----	2961.	-----	33.
-----	134.	-----	1.3E 05	-----	4957.	-----
0.2	-----	2.	-----	3933.	-----	50.
-----	179.	-----	9.7E 04	-----	5337.	-----
0.2	-----	1.	-----	1920.	-----	34.
-----	168.	-----	6.0E 04	-----	4449.	-----
0.3	-----	4.	-----	3438.	-----	69.
-----	145.	-----	4.7E 04	-----	3618.	-----
0.2	-----	4.	-----	4578.	-----	76.
-----	118.	-----	3.6E 04	-----	2835.	-----
0.2	-----	1.	-----	5657.	-----	53.
-----	92.	-----	2.8E 04	-----	2222.	-----
0.2	-----	2.	-----	4316.	-----	67.

AFF- 44
UNLEADED GAS VS. N-BUTANE
1980, OCT. 14

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 N-C4 PPM SE-52C-2	SIDE 2 N-C4 PPM DMS-1	SIDE 1 CS-ISOMS PPM SE-52C-2	SIDE 1 I-C5 PPM DMS-1	N-C5 PPM DMS-1	SIDE 1 N-C6 PPM SE-52C-2	SIDE 1 N-C6 PPM DMS-1
1 620	-160	-----	0.0016	-----	-----	0.0000	-----	-----
1 635	-145	-----	-----	-----	-----	-----	-----	-----
1 650	-130	0.0000	-----	-----	-----	-----	-----	-----
1 744	-76	-----	7.165	-----	-----	-----	-----	-----
1 845	-15	-----	-----	0.0203	0.4722	0.1132	0.0294	0.0964
1 850	-10	0.1300	-----	-----	-----	-----	-----	-----
1 905	5	0.1100	-----	-----	-----	-----	-----	-----
1 935	35	0.1100	-----	-----	-----	-----	-----	-----
1 1005	65	0.0120	-----	0.0182	-----	-----	0.0326	-----
1 1105	125	0.0120	-----	0.0164	-----	-----	0.0304	-----
1 1205	185	0.0120	-----	0.0165	-----	-----	0.0311	-----
1 1305	245	0.1200	-----	0.0163	-----	-----	0.0303	-----
1 1405	305	0.1200	-----	-----	-----	-----	-----	-----
1 1415	315	-----	6.931	-----	-----	-----	-----	-----
1 1505	365	0.1100	-----	0.0134	0.4129	0.0953	0.0278	0.0856

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 TOLUENE PPM 10'C-600	SIDE 1 TOLUENE PPM SE-52C-2	SIDE 1 O-XYL PPM 10'C-600	SIDE 1 O-XYL PPM SE-52C-2	SIDE 1 C2BENZ PPM SE-52C-2	SIDE 1 M+P-XYL PPM 10'C-600	SIDE 1 124TMBR RAW DAT SE-52C-
1 620	-160	-----	-----	-----	-----	-----	-----	-----
1 635	-145	-----	-----	-----	-----	-----	-----	-----
1 650	-130	-----	-----	-----	-----	-----	-----	-----
1 750	-70	-----	-----	-----	-----	-----	-----	-----
1 845	-15	0.5247	0.1903	0.1251	0.0274	0.0361	0.7660	2.1E 0
1 850	-10	-----	-----	-----	-----	-----	-----	-----
1 905	5	-----	-----	-----	-----	-----	-----	-----
1 915	15	-----	-----	-----	-----	-----	-----	-----
1 935	35	-----	-----	-----	-----	-----	-----	-----
1 945	45	-----	-----	-----	-----	-----	-----	-----
1 1005	65	-----	0.1862	-----	0.0254	0.0353	-----	1.6E 0
1 1015	75	-----	-----	-----	-----	-----	-----	-----
1 1105	125	-----	0.1758	-----	0.0236	0.0332	-----	1.4E 0
1 1115	135	-----	-----	-----	-----	-----	-----	-----
1 1205	185	-----	0.1783	-----	0.0234	0.0339	-----	1.4E 0
1 1215	195	-----	-----	-----	-----	-----	-----	-----
1 1305	245	-----	0.1755	-----	0.0237	0.0332	-----	1.3E 0
1 1315	255	-----	-----	-----	-----	-----	-----	-----
1 1405	305	-----	-----	-----	-----	-----	-----	-----
1 1415	315	-----	-----	-----	-----	-----	-----	-----
1 1505	365	0.4741	0.1651	0.1026	0.0216	0.0317	0.5387	1.1E 0
1 1515	375	-----	-----	-----	-----	-----	-----	-----

----- NO DATA TAKEN

11 NOV 1981

PAGE 5

N-C5 PPM DMS-1	SIDE 1 N-C6 PPM SE-52C-2	SIDE 1 N-C6 PPM DMS-1	SIDE 1 N-C7 PPM SE-52C-2	SIDE 1 N-C8 PPM SE-52C-2	SIDE 1 BENZENE PPM 10'C-600
0.0000	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	0.0001
-----	-----	-----	-----	-----	-----
0.1132	0.0294	0.0964	0.0123	0.0540	0.0649
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	0.0326	-----	0.0110	0.0479	-----
-----	0.0304	-----	0.0104	0.0443	-----
-----	0.0311	-----	0.0105	0.0439	-----
-----	0.0303	-----	0.0103	0.0430	-----
-----	-----	-----	-----	-----	-----
0.0953	0.0278	0.0856	0.0094	0.0407	0.0771

SIDE 1 C2BENZ PPM SE-52C-2	SIDE 1 M+P-XYL PPM 10'C-600	SIDE 1 124TMEBZ RAW DATA SE-52C-2	SIDE 1 CO PPM BK6800-1	SIDE 2 CO PPM BK6800-1	SIDE 1 PAN PPM ECD-3	SIDE 2 PAN PPM ECD-3
-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	0.68	0.68	0.000	0.000
-----	-----	-----	-----	0.71	-----	0.000
0.0361	0.7660	2.1E 04	-----	-----	-----	-----
-----	-----	-----	1.03	-----	0.000	-----
-----	-----	-----	0.75	-----	0.001	-----
-----	-----	-----	-----	0.60	-----	0.000
-----	-----	-----	0.71	-----	-----	-----
-----	-----	-----	-----	0.64	-----	0.000
0.0353	-----	1.6E 04	0.86	-----	0.106	-----
-----	-----	-----	-----	0.66	-----	0.002
0.0332	-----	1.4E 04	0.85	-----	0.163	-----
-----	-----	-----	-----	0.68	-----	0.003
0.0339	-----	1.4E 04	0.90	-----	0.174	-----
-----	-----	-----	-----	0.67	-----	0.006
0.0332	-----	1.3E 04	0.86	-----	0.176	-----
-----	-----	-----	-----	0.68	-----	0.006
-----	-----	-----	0.95	-----	0.177	-----
-----	-----	-----	-----	0.68	-----	0.005
0.0317	0.5387	1.1E 04	1.04	-----	0.175	-----
-----	-----	-----	-----	0.68	-----	0.005

2

AFF- 44
UNLEADED GAS VS. N-BUTANE
1980, OCT. 14

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA	SIDE 2 ACETALD PPM 10'C-600	SIDE 2 MEK PPM 10'C-600	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023	SIDE 1 PART.04 PART/CC TSI-023
1 635	-145	-----	-----	0.0015	-----	-----	-----	-----
1 650	-130	-----	-----	-----	-----	1169.	1169.	174.
1 744	-76	-----	-----	0.0017	-----	-----	-----	-----
1 750	-70	-----	-----	-----	-----	-----	1336.	-----
1 758	-62	-----	0.018	-----	-----	-----	-----	-----
1 845	-15	0.021	-----	-----	-----	-----	-----	-----
1 850	-10	-----	-----	-----	-----	2004.	-----	348.
1 905	5	-----	-----	-----	-----	1002.	-----	174.
1 915	15	-----	-----	-----	-----	-----	1336.	-----
1 935	35	-----	-----	-----	-----	5.9E 04	-----	5.4E 0
1 945	45	-----	-----	-----	-----	-----	2004.	-----
1 1005	65	-----	-----	-----	-----	1169.	-----	8700.
1 1015	75	-----	-----	-----	-----	-----	2672.	-----
1 1105	125	-----	-----	-----	-----	2839.	-----	8874.
1 1115	135	-----	-----	-----	-----	-----	1169.	-----
1 1150	170	0.133	-----	-----	-----	-----	-----	-----
1 1205	185	-----	-----	-----	-----	0.	-----	1131.
1 1211	191	-----	0.018	-----	-----	-----	-----	-----
1 1215	195	-----	-----	-----	-----	-----	2171.	-----
1 1305	245	-----	-----	-----	-----	3173.	-----	1218.
1 1315	255	-----	-----	-----	-----	-----	2672.	-----
1 1405	305	-----	-----	-----	-----	3340.	-----	609.
1 1415	315	-----	-----	-----	-----	-----	4008.	-----
1 1435	335	-----	-----	0.0447	0.0355	-----	-----	-----
1 1450	350	0.179	-----	-----	-----	-----	-----	-----
1 1505	365	-----	-----	-----	-----	3006.	-----	783.
1 1511	371	-----	0.017	-----	-----	-----	-----	-----
1 1515	375	-----	-----	-----	-----	-----	2004.	-----

----- NO DATA TAKEN

	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023	SIDE 1 PART.042 PART/CC TSI-023	SIDE 2 PART.042 PART/CC TSI-023	SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023
2	-----	-----	-----	-----	-----	-----
600	1169.	1169.	174.	174.	400.	400.
	-----	-----	-----	-----	-----	-----
	-----	1336.	-----	348.	-----	444.
	-----	-----	-----	-----	-----	-----
	2004.	-----	348.	-----	222.	-----
	1002.	-----	174.	-----	266.	-----
	-----	1336.	-----	435.	-----	355.
	5.9E 04	-----	5.4E 04	-----	6.1E 04	-----
	-----	2004.	-----	348.	-----	355.
	1169.	-----	8700.	-----	6.9E 04	-----
	-----	2672.	-----	522.	-----	444.
	2839.	-----	8874.	-----	2.4E 04	-----
	-----	1169.	-----	174.	-----	355.
	-----	-----	-----	-----	-----	-----
	0.	-----	1131.	-----	1.3E 04	-----
	-----	-----	-----	-----	-----	-----
	-----	2171.	-----	348.	-----	666.
	3173.	-----	1218.	-----	7326.	-----
	-----	2672.	-----	696.	-----	799.
	3340.	-----	609.	-----	4484.	-----
	-----	4008.	-----	609.	-----	710.
55	-----	-----	-----	-----	-----	-----
	3006.	-----	783.	-----	3374.	-----
	-----	-----	-----	-----	-----	-----
	-----	2004.	-----	783.	-----	1066.

AFF- 44
UNLEADED GAS VS. N-BUTANE
1980, OCT. 14

CLOCK	ELAPSED	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
TIME	TIME	PART.133	PART.133	PART.237	PART.237	PART.422	PART.422	PART.750	PART.750
DY HR.	(MIN)	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
		TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
1 650	-130	145.	145.	12.	12.	13.	13.	4.	4.
1 750	-70	-----	145.	-----	49.	-----	0.	-----	4.
1 850	-10	120.	-----	61.	-----	7.	-----	0.	-----
1 905	5	96.	-----	62.	-----	-7.	-----	0.	-----
1 915	15	-----	217.	-----	49.	-----	0.	-----	7.
1 935	35	7664.	-----	603.	-----	80.	-----	18.	-----
1 945	45	-----	193.	-----	62.	-----	0.	-----	0.
1 1005	65	4.7E 04	-----	4293.	-----	354.	-----	77.	-----
1 1015	75	-----	193.	-----	8.	-----	0.	-----	4.
1 1105	125	5.3E 04	-----	7072.	-----	820.	-----	119.	-----
1 1115	135	-----	169.	-----	49.	-----	0.	-----	4.
1 1205	185	3.6E 04	-----	8462.	-----	867.	-----	126.	-----
1 1215	195	-----	121.	-----	98.	-----	27.	-----	7.
1 1305	245	2.7E 04	-----	7454.	-----	827.	-----	116.	-----
1 1315	255	-----	337.	-----	49.	-----	13.	-----	11.
1 1405	305	2.0E 04	-----	5941.	-----	667.	-----	109.	-----
1 1415	315	-----	241.	-----	98.	-----	-13.	-----	4.
1 1505	365	1.5E 04	-----	5055.	-----	540.	-----	77.	-----
1 1515	375	-----	386.	-----	74.	-----	0.	-----	4.

----- NO DATA TAKEN

AFF- 45
UNLEADED GASOLINE: 3 DAY DYNAMIC
1980,OCT 15-17

DAY 1 (OCT 15)
0645: BAG FILLED WITH PURE AIR.
0710: DRY BULB TEMP: 13.5C; WET BULB TEMP: 3.6C; R.H.=16%
0734: INJECT 4ML NO2
0736: INJECT 12 ML NO
0742: INJECT 200 ML FREON 12
0747-0802: INJECT 570 MICROLITERS UNLEADED GASOLINE
TOTAL DILUTION FACTOR, DAY 1 = 0.471
DAY 2 (OCT 16)
0930-1530: TOTAL DILUTION FACTOR, DAY 2 = 0.490
DAY 3 (OCT 17)
0834: INJECT 9.0 ML NO AT 2 L/MIN INTO BAG
0844: INJECT 3.0 ML NO2 AT 200 ML/MIN INTO BAG
0930-1430: TOTAL DILUTION FACTOR, DAY 3 = 0.554

RESULTS	DAY 1	DAY 2	DAY 3
-----	-----	-----	-----
AVG.T(DEG.C)	22(+3)	22(+3)	24(+4)
AVG.UV(MW/CM2)	1.5(+0.7)	1.7(+0.7)	1.6(+0.5)

T=0 AT 900 PST

BAG NO. 18 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	22.1	4.2	DEG C
UV RAD	EPPLEY-2	1.64	0.63	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.272	PPM
NO2-UNC	B-NOX-1	0.113	PPM
THC	BK6800-1	30.10	PPHC

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR:SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR:SN143
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300036-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
4025	AF DMS	AF-LAB; DIMETHYLSULFOLANE GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
2750	SE-52C-2	RM-121; 30M SE-52 QUARTZ CAP. GC; FID
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD
2100	PN-1	RM-121 POROPAK-N GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG

AFF- 45
UNLEADED GASOLINE: 3 DAY DYNAMIC
1980, OCT 15-17

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	THC PPMC BK6800-1	T DEG C DGRIC-1	UV RAD MW/CM2 EPPLEY-
1 650	-130	-----	-----	-----	-----	-----	-----	-----
1 700	-120	0.000	0.008	0.002	0.006	1.40	10.6	-----
1 723	-97	-----	-----	-----	-----	-----	-----	-----
1 816	-44	-----	-----	-----	-----	-----	-----	-----
1 820	-40	0.001	0.272	0.113	0.406	30.10	14.8	-----
1 905	5	0.008	0.200	0.162	0.392	29.40	16.6	1.75
1 1005	65	0.410	0.012	0.183	0.197	23.70	19.8	2.31
1 1105	125	0.407	0.013	0.148	0.162	20.50	23.5	2.65
1 1205	185	0.364	0.014	0.137	0.151	18.10	25.2	2.36
1 1305	245	0.330	0.014	0.121	0.137	16.00	23.7	1.44
1 1405	305	0.300	0.013	0.110	0.126	14.30	24.3	1.16
1 1505	365	0.269	0.016	0.099	0.112	12.80	23.0	0.89
1 1605	425	0.232	0.013	0.082	0.096	11.30	20.4	0.61
2 820	1400	-----	-----	-----	-----	-----	-----	-----
2 905	1445	0.180	0.011	0.070	0.079	11.40	17.0	1.46
2 1005	1505	0.169	0.010	0.067	0.075	10.30	21.6	2.16
2 1105	1565	0.165	0.010	0.060	0.070	9.45	23.6	2.68
2 1205	1625	0.173	0.011	0.056	0.065	8.39	22.4	1.87
2 1305	1685	0.181	0.010	0.050	0.060	7.74	25.0	1.98
2 1405	1745	0.143	0.010	0.039	0.047	6.05	24.2	1.64
2 1510	1810	0.142	0.009	0.037	0.043	5.54	23.7	0.86
2 1605	1865	0.145	0.009	0.034	0.042	5.57	21.1	0.61
3 825	2845	0.116	0.009	0.031	0.039	5.73	17.4	1.05
3 905	2885	0.013	0.123	0.269	0.410	5.63	19.3	1.57
3 1005	2945	0.042	0.050	0.292	0.353	5.06	22.3	1.88
3 1105	3005	0.090	0.021	0.250	0.277	4.23	24.8	2.27
3 1205	3065	0.147	0.011	0.213	0.230	3.83	26.4	2.27
3 1305	3125	0.184	0.009	0.162	0.172	3.22	27.7	1.84
3 1405	3185	0.219	0.007	0.140	0.147	2.86	28.5	1.32
3 1505	3245	0.226	0.007	0.123	0.130	3.53	26.5	0.85

----- NO DATA TAKEN

11 NOV 1981

PAGE 2

NC	THC PPMC BK6800-1	T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-2	FREON 12 RAW DATA AF DMS	FREON 12 RAW DATA DMS-1	CONDENS 10E3/CC CNC-143	#PART>.3 PART/CC CLIMET
---	-----	-----	-----	-----	-----	-----	-----
006	1.40	10.6	-----	-----	-----	0.0	0.
---	-----	-----	-----	-----	-----	-----	-----
---	-----	-----	-----	-----	255.2	-----	-----
006	30.10	14.8	-----	-----	-----	0.3	0.
092	29.40	16.6	1.75	2.360	-----	0.7	0.
097	23.70	19.8	2.31	2.168	-----	72.0	0.
062	20.50	23.5	2.65	1.920	-----	45.0	0.
051	18.10	25.2	2.36	1.720	-----	30.0	0.
037	16.00	23.7	1.44	1.560	-----	21.7	0.
026	14.30	24.3	1.16	1.412	-----	16.2	1.
012	12.80	23.0	0.89	1.272	-----	12.2	0.
096	11.30	20.4	0.61	1.112	121.3	8.8	0.
---	-----	-----	-----	-----	111.6	-----	-----
079	11.40	17.0	1.46	1.102	-----	0.7	0.
075	10.30	21.6	2.16	1.014	-----	0.4	0.
070	9.45	23.6	2.68	0.886	-----	1.1	1.
065	8.39	22.4	1.87	0.796	-----	1.6	1.
060	7.74	25.0	1.98	0.774	-----	1.3	2.
047	6.05	24.2	1.64	0.572	-----	1.4	1.
043	5.54	23.7	0.86	0.538	-----	1.0	1.
042	5.57	21.1	0.61	0.540	59.39	0.8	1.
---	-----	-----	-----	-----	-----	-----	-----
039	5.73	17.4	1.05	0.523	-----	1.1	1.
010	5.63	19.3	1.57	0.526	57.86	1.0	1.
053	5.06	22.3	1.88	0.512	-----	0.6	1.
077	4.23	24.8	2.27	0.435	-----	0.6	1.
030	3.83	26.4	2.27	0.409	-----	0.5	1.
072	3.22	27.7	1.84	0.340	-----	0.6	1.
047	2.86	28.5	1.32	0.312	-----	0.8	1.
030	3.53	26.5	0.85	0.290	31.74	0.6	2.

AFF- 45
UNLEADED GASOLINE: 3 DAY DYNAMIC
1980,OCT 15-17

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	#PART>.5 PART/CC CLIMET	#PART>1 PART/CC CLIMET	BSCAT 10-4 M-1 MRI-388	AER.V UM3/CC TSI-023	AER.N PART/CC TSI-023	AER S UM2/CC TSI-023	N-C4 PPM DMS-1
1 650	-130	-----	-----	-----	-----	-----	-----	0.0054
1 700	-120	0.	0.	0.2	2.	8335.	88.	-----
1 723	-97	-----	-----	-----	-----	-----	-----	0.0122
1 815	-45	-----	-----	-----	-----	-----	-----	-----
1 816	-44	-----	-----	-----	-----	-----	-----	0.0671
1 820	-40	0.	0.	0.2	1.	2910.	40.	-----
1 905	5	0.	0.	0.2	2.	4037.	48.	-----
1 1005	65	0.	0.	1.3	88.	1.1E 05	3632.	-----
1 1105	125	0.	0.	2.2	92.	7.5E 04	3159.	-----
1 1205	185	0.	0.	2.3	76.	4.7E 04	2455.	-----
1 1305	245	0.	0.	2.3	62.	3.3E 04	1906.	-----
1 1405	305	0.	0.	2.1	48.	2.9E 04	1490.	-----
1 1505	365	0.	0.	1.8	39.	2.3E 04	1169.	-----
1 1605	425	0.	0.	1.4	29.	1.7E 04	884.	0.0312
2 820	1400	-----	-----	-----	-----	-----	-----	0.0225
2 905	1445	0.	0.	0.3	2.	6469.	81.	-----
2 1005	1505	0.	0.	0.2	2.	1068.	26.	-----
2 1105	1565	0.	0.	0.2	1.	1561.	22.	-----
2 1205	1625	0.	0.	0.2	2.	2563.	64.	-----
2 1305	1685	0.	0.	0.2	4.	1899.	96.	-----
2 1405	1745	0.	0.	0.2	4.	1508.	86.	-----
2 1505	1805	-----	-----	-----	-----	-----	-----	-----
2 1510	1810	0.	0.	0.2	4.	1718.	81.	-----
2 1605	1865	0.	0.	0.2	2.	1205.	71.	0.0153
3 825	2845	0.	0.	0.2	0.	639.	11.	-----
3 905	2885	0.	0.	0.2	1.	787.	16.	0.0150
3 1005	2945	0.	0.	0.2	0.	1042.	17.	-----
3 1105	3005	0.	0.	0.2	1.	404.	15.	-----
3 1205	3065	0.	0.	0.2	-0.	491.	6.	-----
3 1305	3125	0.	0.	0.2	0.	760.	13.	-----
3 1405	3185	0.	0.	0.2	2.	1050.	33.	-----
3 1505	3245	0.	0.	0.2	1.	1265.	31.	0.0075

----- NO DATA TAKEN

225

R.V S/CC	AER.N PART/CC	AER.S UM2/CC	N-C4 PPM	C5-ISOMS PPM	I-C5 PPM	N-C5 PPM
-023	TSI-023	TSI-023	DMS-1	SE-52C-2	DMS-1	DMS-1
-----	-----	-----	0.0054 A	-----	0.0010	0.0003
2.	8335.	88.	-----	-----	-----	-----
-----	-----	-----	0.0122	-----	0.0009	0.0002
-----	-----	-----	-----	0.0147	-----	-----
-----	-----	-----	0.0671	-----	0.3363	0.0820
1.	2910.	40.	-----	-----	-----	-----
2.	4037.	48.	-----	-----	-----	-----
88.	1.1E 05	3632.	-----	0.0100	-----	-----
92.	7.5E 04	3159.	-----	0.0055	-----	-----
76.	4.7E 04	2455.	-----	0.0070	-----	-----
62.	3.3E 04	1906.	-----	0.0056	-----	-----
48.	2.9E 04	1490.	-----	0.0059	-----	-----
39.	2.3E 04	1169.	-----	0.0050	-----	-----
29.	1.7E 04	884.	0.0312	0.0043	0.1415	0.0339
-----	-----	-----	0.0229	0.0048	0.1316	0.0313
2.	6469.	81.	-----	-----	-----	-----
2.	1068.	26.	-----	0.0043	-----	-----
1.	1561.	22.	-----	0.0027	-----	-----
2.	2563.	64.	-----	-----	-----	-----
4.	1899.	96.	-----	0.0027	-----	-----
4.	1508.	86.	-----	0.0021	-----	-----
-----	-----	-----	-----	0.0020	-----	-----
4.	1718.	81.	-----	-----	-----	-----
2.	1205.	71.	0.0153	0.0022	0.0645	0.0151
0.	639.	11.	-----	-----	-----	-----
1.	787.	16.	0.0150	0.0020	0.0645	0.0154
0.	1042.	17.	-----	0.0016	-----	-----
1.	404.	15.	-----	0.0013	-----	-----
0.	491.	6.	-----	0.0014	-----	-----
0.	760.	13.	-----	0.0024	-----	-----
2.	1050.	33.	-----	-----	-----	-----
1.	1265.	31.	0.0075	0.0010	0.0273	0.0066

AFF- 45
UNLEADED GASOLINE: 3 DAY DYNAMIC
1980, OCT 15-17

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	N-C6 PPM SE-52C-2	N-C6 PPM DMS-1	N-C7 PPM SE-52C-2	N-C8 PPM SE-52C-2	BENZENE PPM 10'C-600	TOLUENE PPM SE-52C-2	TOLUENE PPM 10'C-600
1 650	-130	-----	-----	-----	-----	0.0004	-----	-----
1 723	-97	-----	-----	-----	-----	-----	-----	-----
1 815	-45	0.0108	-----	0.0090	0.0391	-----	0.0693	-----
1 816	-44	-----	0.0721	-----	-----	0.0487	-----	0.3590
1 1005	65	0.0102	-----	0.0074	0.0302	-----	0.0590	-----
1 1105	125	0.0077	-----	0.0053	0.0228	-----	0.0449	-----
1 1205	185	0.0069	-----	0.0047	0.0206	-----	0.0408	-----
1 1305	245	0.0062	-----	0.0044	0.0185	-----	0.0371	-----
1 1405	305	0.0055	-----	0.0038	0.0160	-----	0.0324	-----
1 1505	365	0.0052	-----	0.0039	0.0158	-----	0.0314	-----
1 1605	425	0.0044	0.0288	0.0034	0.0139	0.0213	0.0273	0.1410
2 820	1400	0.0044	0.0270	0.0030	0.0120	0.0198	0.0249	0.1348
2 1005	1505	0.0039	-----	0.0030	0.0115	-----	0.0238	-----
2 1105	1565	0.0033	-----	0.0027	0.0102	-----	0.0204	-----
2 1205	1625	-----	-----	-----	-----	-----	-----	-----
2 1305	1685	0.0025	-----	0.0022	0.0087	-----	0.0172	-----
2 1405	1745	0.0019	-----	0.0016	0.0067	-----	0.0129	-----
2 1505	1805	0.0015	-----	0.0013	0.0043	-----	0.0108	-----
2 1605	1865	0.0018	0.0122	0.0014	-----	0.0099	0.0118	0.0628
3 905	2885	0.0017	0.0126	0.0014	0.0038	0.0109	0.0109	0.0600
3 1005	2945	0.0014	-----	0.0011	0.0038	-----	0.0089	-----
3 1105	3005	0.0011	-----	0.0008	0.0026	-----	0.0073	-----
3 1205	3065	0.0010	-----	0.0008	0.0036	-----	0.0073	-----
3 1305	3125	0.0020	-----	0.0016	0.0057	-----	0.0129	-----
3 1405	3185	-----	-----	-----	-----	-----	-----	-----
3 1505	3245	0.0007	0.0054	0.0006	0.0022	0.0060	0.0046	0.0252

----- NO DATA TAKEN

	BENZENE PPM 10'C-600	TOLUENE PPM SE-52C-2	TOLUENE PPM 10'C-600	O-XYL PPM SE-52C-2	O-XYL PPM 10'C-600	C2BENZ PPM SE-52C-2	M+P-XYL PPM 10'C-600
-	0.0004	-----	-----	-----	0.0010	-----	0.0050
1	-----	0.0693	-----	0.0196	-----	1.1E 04	-----
-	0.0487	-----	0.3590	-----	0.0908	-----	0.5597
2	-----	0.0590	-----	0.0157	-----	9777.	-----
8	-----	0.0449	-----	0.0120	-----	7538.	-----
6	-----	0.0408	-----	0.0109	-----	6931.	-----
5	-----	0.0371	-----	0.0098	-----	6333.	-----
0	-----	0.0324	-----	0.0086	-----	5550.	-----
8	-----	0.0314	-----	0.0082	-----	5184.	-----
9	0.0213	0.0273	0.1410	0.0071	0.0318	5564.	0.1610
0	0.0198	0.0249	0.1348	0.0062	0.0298	4081.	0.1494
0	-----	0.0238	-----	0.0060	-----	3933.	-----
2	-----	0.0204	-----	0.0052	-----	3417.	-----
-	-----	-----	-----	-----	-----	-----	-----
2	-----	0.0172	-----	0.0042	-----	2894.	-----
7	-----	0.0129	-----	0.0031	-----	2077.	-----
3	-----	0.0108	-----	0.0026	-----	1835.	-----
-	0.0099	0.0118	0.0628	0.0028	0.0131	1982.	0.0594
8	0.0109	0.0109	0.0600	0.0025	0.0124	1764.	0.0542
9	-----	0.0089	-----	0.0021	-----	1462.	-----
8	-----	0.0073	-----	0.0016	-----	1234.	-----
6	-----	0.0073	-----	0.0015	-----	1216.	-----
7	-----	0.0129	-----	0.0026	-----	2177.	-----
-	-----	-----	-----	-----	-----	-----	-----
2	0.0060	0.0046	0.0252	0.0009	0.0038	808.0	0.0129

2

AFF- 45
UNLEADED GASOLINE: 3 DAY DYNAMIC
1980 OCT 15-17

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	124TMEBZ RAW DATA SE-52C-2	CO PPM BK6800-1	PAN PPM ECD-3	HCHO PPM CA	PART.024 PART/CC TSI-023	PART.042 PART/CC TSI-023	PART.044 PART/CC TSI-044
1 650	-130	-----	-----	-----	-----	-----	-----	-----
1 700	-120	-----	1.32	0.001	-----	5177.	1218.	1332.
1 815	-45	1.5E 04	-----	-----	-----	-----	-----	-----
1 820	-40	-----	1.34	0.001	-----	1336.	609.	710.
1 846	-14	-----	-----	-----	0.007	-----	-----	-----
1 905	5	-----	1.29	0.001	-----	2505.	783.	488.
1 1005	55	9447.	1.35	0.103	-----	668.	8352.	6.7E
1 1105	125	6860.	1.37	0.137	-----	1.0E 04	1566.	2.8E
1 1205	185	6112.	1.22	0.135	-----	2505.	435.	1.6E
1 1207	187	-----	-----	-----	0.089	-----	-----	-----
1 1305	245	5284.	1.18	0.125	-----	-668.	2523.	8836.
1 1405	305	4439.	1.17	0.115	-----	3841.	1740.	6704.
1 1505	365	4090.	1.00	0.103	-----	4509.	1305.	4662.
1 1600	420	-----	-----	-----	0.085	-----	-----	-----
1 1605	425	3596.	1.03	0.094	-----	2505.	1218.	3641.
2 820	1400	2777.	-----	-----	-----	-----	-----	-----
2 900	1440	-----	-----	-----	0.105	-----	-----	-----
2 905	1445	-----	1.41	0.077	-----	3674.	1131.	1110.
2 1005	1505	2945.	0.88	0.074	-----	668.	261.	44.
2 1105	1565	2490.	0.99	0.065	-----	835.	174.	488.
2 1200	1620	-----	-----	-----	0.078	-----	-----	-----
2 1205	1625	-----	0.99	0.059	-----	1002.	261.	710.
2 1305	1685	1905.	0.85	0.055	-----	334.	87.	488.
2 1405	1745	1245.	0.85	0.041	-----	167.	174.	355.
2 1505	1805	-----	-----	-----	-----	-----	-----	-----
2 1510	1810	-----	0.80	0.037	-----	668.	0.	311.
2 1600	1860	-----	-----	-----	0.059	-----	-----	-----
2 1605	1865	1207.	0.79	0.037	-----	334.	-87.	266.
3 825	2845	-----	0.87	0.030	-----	167.	174.	178.
3 905	2885	920.0	0.72	0.031	-----	501.	0.	222.
3 910	2890	-----	-----	-----	0.071	-----	-----	-----
3 1005	2945	600.0	0.88	0.027	-----	501.	174.	222.
3 1105	3005	426.0	0.94	0.029	-----	167.	0.	133.
3 1200	3060	-----	-----	-----	0.060	-----	-----	-----
3 1205	3065	448.0	0.92	0.035	-----	167.	174.	44.
3 1305	3125	2261.	0.86	0.037	-----	334.	87.	266.
3 1405	3185	-----	0.83	0.040	-----	501.	0.	355.
3 1500	3240	-----	-----	-----	0.048	-----	-----	-----
3 1505	3245	1186.	0.82	0.042	-----	668.	0.	400.

----- NO DATA TAKEN

11 NOV 1981

PAGE 5

CHQ PM LA	PART.024 PART/CC TSI-023	PART.042 PART/CC TSI-023	PART.075 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART.237 PART/CC TSI-023	PART.422 PART/CC TSI-023	PART.750 PART/CC TSI-023
-----	-----	-----	-----	-----	-----	-----	-----
-----	5177.	1218.	1332.	530.	74.	0.	4.
-----	-----	-----	-----	-----	-----	-----	-----
-----	1336.	609.	710.	193.	61.	0.	0.
-----	-----	-----	-----	-----	-----	-----	-----
.007	2505.	783.	488.	217.	37.	0.	7.
-----	668.	8352.	6.7E 04	3.2E 04	2460.	233.	35.
-----	1.0E 04	1566.	2.8E 04	3.1E 04	3702.	293.	42.
-----	2505.	435.	1.6E 04	2.4E 04	3382.	260.	39.
-----	-----	-----	-----	-----	-----	-----	-----
.089	-668.	2523.	8836.	1.9E 04	2792.	240.	35.
-----	3841.	1740.	6704.	1.4E 04	2288.	200.	25.
-----	4509.	1305.	4662.	1.1E 04	2042.	160.	18.
-----	-----	-----	-----	-----	-----	-----	-----
.085	2505.	1218.	3641.	7977.	1587.	120.	11.
-----	-----	-----	-----	-----	-----	-----	-----
.105	-----	-----	-----	-----	-----	-----	-----
-----	3674.	1131.	1110.	434.	123.	-7.	4.
-----	668.	261.	44.	48.	49.	-13.	11.
-----	835.	174.	488.	48.	12.	0.	4.
-----	-----	-----	-----	-----	-----	-----	-----
.078	1002.	261.	710.	530.	49.	7.	4.
-----	334.	87.	488.	843.	123.	20.	4.
-----	167.	174.	355.	651.	148.	7.	7.
-----	-----	-----	-----	-----	-----	-----	-----
-----	668.	0.	311.	578.	148.	7.	7.
-----	-----	-----	-----	-----	-----	-----	-----
.059	334.	-87.	266.	506.	172.	13.	0.
-----	-----	-----	-----	-----	-----	-----	-----
-----	167.	174.	178.	120.	0.	0.	0.
-----	501.	0.	222.	48.	12.	0.	4.
-----	-----	-----	-----	-----	-----	-----	-----
.071	501.	174.	222.	120.	25.	0.	0.
-----	167.	0.	133.	72.	25.	7.	0.
-----	-----	-----	-----	-----	-----	-----	-----
.060	167.	174.	44.	72.	37.	0.	-4.
-----	334.	87.	266.	48.	25.	0.	0.
-----	501.	0.	355.	145.	49.	-7.	7.
-----	-----	-----	-----	-----	-----	-----	-----
.048	668.	0.	400.	145.	49.	0.	4.

AFF- 46
NOX - AIR IRRADIATION
1980, OCT 20

0918: START FILL
1019: FILL ENDED
1022: RH DRY: 31.0 WET:12.2 RH=< 10%
1038-1040: INJECT 6.0 ML NO2
1040-1042: INJECT 18.0 ML NO
1042-1044: INJECT .4 ML C3, .4 ML C3=
1050: HCHO PRE T=0
1130: UNCOVER BAG
1135: WEATHER- EXTREMELY CLEAR, HOT; SANTA ANA CONDITIONS
1340: RUN OVER; BAG COVERED; BAG DUMPED
NO OZONE FORMATION OCCURRED.

RESULTS:

CALC. AVG. OH = $30.8 \times \text{LN}(\text{PROPANE}/\text{PROPENE})/\text{DT} = 0.037 \text{ FPT}$
CALC. RAD. INPUT = $16.0 \times (\text{AVG. OH}) \times (60 + \text{MIN. AVG. NO}_2) = 0.08 \text{ PPB/MIN}$
NO OXIDATION RATE NEGLIGABLE
AVG. K1 ESTIMATED FROM RADION. DATA = 0.34/MIN

T=0 AT 1130 PST

BAG NO. 18 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	31.8	1.1	DEG C
UV RAD	EPPLEY	2.67	0.24	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.369	PPM
NO2-UNC	B-NOX-1	0.147	PPM
PROPANE	DMS-1	0.0098	PPM
PROPENE	DMS-1	0.0084	PPM

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	B-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038-2
4850	BK6800-1	BECKMAN HYDROCARBON GC MD 6800 SN100015D
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479
4130	EPPLEY	ARB LAB; EPPLEY 11692 UV RADIOMETER
2100	PN-1	RM 121; POROPAK N ; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

AFF- 46
NOX - AIR IRRADIATION
1980, OCT 20

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	PROPANE PPM DMS-1	PROPENE PPM DMS-1	LNC3/C3=	T DEG (C) DORIC-1
1 1030	-60	0.000	0.002	0.002	-----	-----	-----	29.6
1 1109	-21	-----	-----	-----	0.0120	0.0095	0.2285	-----
1 1110	-20	0.369	0.147	0.514	-----	-----	-----	30.3
1 1130	0	-----	-----	-----	0.0098	0.0084	0.1594	-----
1 1140	10	0.370	0.143	0.514	-----	-----	-----	30.4
1 1145	15	-----	-----	-----	0.0117	0.0093	0.2297	-----
1 1150	20	0.368	0.140	0.504	-----	-----	-----	31.4
1 1200	30	0.371	0.143	0.512	0.0118	0.0091	0.2585	31.4
1 1210	40	0.372	0.139	0.506	-----	-----	-----	32.5
1 1215	45	-----	-----	-----	0.0115	0.0088	0.2633	-----
1 1220	50	0.370	0.140	0.506	-----	-----	-----	32.4
1 1230	60	0.369	0.139	0.504	0.0106	0.0081	0.2649	32.4
1 1240	70	0.369	0.138	0.504	-----	-----	-----	32.2
1 1245	75	-----	-----	-----	0.0086	0.0062	0.3226	-----
1 1250	80	0.370	0.140	0.504	-----	-----	-----	32.8
1 1300	90	0.367	0.137	0.500	0.0102	0.0074	0.3191	32.3
1 1310	100	0.364	0.138	0.500	-----	-----	-----	32.8
1 1315	105	-----	-----	-----	0.0105	0.0073	0.3559	-----
1 1320	110	0.366	0.135	0.500	-----	-----	-----	32.8
1 1330	120	0.368	0.133	0.500	0.0113	0.0080	0.3467	32.5

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	METHANE PPM BK6800-1	METHANE PPM PN-1	ETHENE PPM PN-1	ETHANE PPM PN-1	ACETYLEN PPM PN-1	HCHO PPM CA	BENZENE PPM 10'C-60
1 1030	-60	1.63	-----	-----	-----	-----	-----	-----
1 1100	-30	-----	-----	-----	-----	-----	0.009	-----
1 1109	-21	-----	-----	0.0018	0.0021	0.0014	-----	0.0001
1 1110	-20	1.62	-----	-----	-----	-----	-----	-----
1 1140	10	1.61	-----	-----	-----	-----	-----	-----
1 1150	20	1.61	-----	-----	-----	-----	-----	-----
1 1200	30	1.63	-----	-----	-----	-----	-----	-----
1 1210	40	1.61	-----	-----	-----	-----	-----	-----
1 1220	50	1.61	-----	-----	-----	-----	-----	-----
1 1230	60	1.62	-----	-----	-----	-----	-----	-----
1 1240	70	1.62	-----	-----	-----	-----	-----	-----
1 1250	80	1.60	-----	-----	-----	-----	-----	-----
1 1300	90	1.61	-----	-----	-----	-----	-----	-----
1 1310	100	1.58	-----	-----	-----	-----	-----	-----
1 1320	110	1.60	-----	-----	-----	-----	-----	-----
1 1330	120	-----	1.70	0.0015	0.0023	0.0024	-----	0.0002
1 1331	121	-----	-----	-----	-----	-----	0.014	-----

----- NO DATA TAKEN

NOTES

A K1 CALCULATED FROM UV RADIOMETER DATA

ANE	PROPENE PPM DMS-1	LNC3/C3=	T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY	CO PPM BK6800-1	THC PPMC BK6800-1
---	-----	-----	29.6	-----	0.53	1.22
20	0.0095	0.2285	---	-----	---	---
---	-----	-----	30.3	-----	0.55	1.35
98	0.0084	0.1594	---	-----	---	---
---	-----	-----	30.4	2.91	0.56	1.24
17	0.0093	0.2297	---	-----	---	---
---	-----	-----	31.4	2.85	0.55	1.22
18	0.0091	0.2585	31.4	2.94	0.64	1.18
---	-----	-----	32.5	2.77	0.53	1.25
15	0.0088	0.2633	---	-----	---	---
---	-----	-----	32.4	2.85	0.47	1.19
06	0.0081	0.2649	32.4	2.78	0.58	1.25
---	-----	-----	32.2	2.68	0.61	1.24
86	0.0062	0.3226	---	-----	---	---
---	-----	-----	32.8	2.61	0.58	1.19
02	0.0074	0.3191	32.3	2.69	0.56	1.24
---	-----	-----	32.8	2.41	0.52	1.20
05	0.0073	0.3559	---	-----	---	---
---	-----	-----	32.8	2.34	0.54	1.22
13	0.0080	0.3467	32.5	2.19	-----	-----

ONE	ACETYLEN PPM PN-1	HCHO PPM CA	BENZENE PPM 10'C-600	ACETALD PPM 10'C-600
---	-----	-----	-----	-----
---	-----	0.009	-----	-----
21	0.0014	-----	0.0001	0.005
---	-----	-----	-----	-----
---	-----	-----	-----	-----
---	-----	-----	-----	-----
---	-----	-----	-----	-----
---	-----	-----	-----	-----
---	-----	-----	-----	-----
---	-----	-----	-----	-----
---	-----	-----	-----	-----
---	-----	-----	-----	-----
---	-----	-----	-----	-----
23	0.0024	-----	0.0002	0.003
---	-----	0.014	-----	-----

AFF- 47
NOX - AIR IRRADIATION
1980, OCT 23

BAG FILLED WITH <10% RH PURE AIR.
1104: 6 ML NO2 INJECTED
1106: 18 ML NO INJECTED
1108: .4 ML EACH OF PROPANE AND PROPENE INJECTED
1130: UNCOVER BAG (T=0)
1340: RUN OVER
NO OZONE FORMATION OCCURRED.
BAG FILLED WITH DRY AIR.

RESULTS:

CALC. AVG. OH = $30.8 * D \ln(\text{PROPANE}/\text{PROPENE})/DT = 0.026 \text{ PPT}$
CALC. RAD. INPUT = $16.0 * (\text{AVG. OH}) * (60 + \text{MIN. AVG. NO2}) = 0.06 \text{ PPB/MIN}$
NO OXIDATION RATE NEGLIGABLE
AVG. K1 ESTIMATED FROM UV RAD DATA = $0.32 (+0.04)/\text{MIN}$

T=0 AT 1130 PST

BAG NO. 19 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	33.6	1.2	DEG C
UV RAD	EPPLEY	2.257	0.350	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.394	PPM
NO2-UNC	B-NOX-1	0.144	PPM
PROPANE	DMS-1	0.0112	PPM
PROPENE	DMS-1	0.0091	PPM

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038-2
4850	BK6800-1	BECKMAN HYDROCARBON GC MD 6800 SN100015D
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479
4130	EPPLEY	ARB LAB; EPPLEY 11692 UV RADIOMETER
2200	DMS-1	RM-121; DIMETHYLSULFOLANE; FID
2100	PN-1	RM 121; POROPAK N ; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

AFF- 47
NOX - AIR IRRADIATION
1980, OCT 23

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	PROPANE PPM DMS-1	PROPENE PPM DMS-1	LNC3/C3=	T DEG C DORIC-1
1 1120	-10	-----	-----	-----	0.0112	0.0091	0.2045	-----
1 1125	-5	0.394	0.144	0.538	-----	-----	-----	31.4
1 1131	1	-----	-----	-----	0.0106	0.0088	0.1952	-----
1 1145	15	0.392	0.147	0.540	0.0100	0.0074	0.2981	32.0
1 1200	30	0.393	0.141	0.538	0.0074	0.0061	0.1915	33.4
1 1215	45	0.392	0.148	0.538	0.0105	0.0083	0.2316	33.4
1 1230	60	0.387	0.139	0.526	0.0112	0.0085	0.2774	33.9
1 1245	75	0.388	0.141	0.524	0.0110	0.0082	0.2861	34.2
1 1300	90	0.388	0.139	0.524	0.0102	0.0078	0.2684	34.2
1 1315	105	0.388	0.137	0.524	0.0105	0.0078	0.2993	34.3
1 1330	120	0.388	0.139	0.524	0.0107	0.0081	0.2764	35.2

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	METHANE PPM BK6800-1	METHANE PPM FN-1	ETHENE PPM FN-1	ETHANE PPM FN-1	ACETYLEN PPM FN-1	HCHO PPM CA	BENZENE PPM 10'C-60
1 1120	-10	-----	1.95	0.002	0.0043	0.0011	-----	0.0003
1 1125	-5	1.85	-----	-----	-----	-----	0.142	-----
1 1145	15	1.81	-----	-----	-----	-----	-----	-----
1 1200	30	1.84	-----	-----	-----	-----	-----	-----
1 1215	45	1.80	-----	-----	-----	-----	-----	-----
1 1230	60	1.81	-----	-----	-----	-----	-----	-----
1 1245	75	1.95	-----	-----	-----	-----	-----	-----
1 1300	90	1.80	-----	-----	-----	-----	-----	-----
1 1315	105	1.83	-----	-----	-----	-----	-----	-----
1 1330	120	1.80	1.93	0.008	0.0162	0.0038	0.005	0.0003

----- NO DATA TAKEN

NOTES

A K1 CALCULATED FROM UV RADIOMETER DATA

PENE PPM S-1	LNC3/C3=	T DEG C DORIC-1	UV RAD MW/CM2 EPFLEY	CO PPM BK6800-1	THC PPMC BK6800-1
0091	0.2045	-----	-----	-----	-----
-----	-----	31.4	-----	2.13	1.23
0088	0.1952	-----	-----	-----	-----
0074	0.2981	32.0	2.858	2.10	1.08
0061	0.1915	33.4	2.481	2.29	1.22
0083	0.2316	33.4	2.439	2.30	1.37
0085	0.2774	33.9	2.370	2.32	1.21
0082	0.2861	34.2	2.203	2.58	1.43
0078	0.2684	34.2	2.007	2.44	1.34
0078	0.2993	34.3	1.889	2.70	1.45
0081	0.2764	35.2	1.812	2.60	1.40

ETHYLEN PPM RN-1	HCHO PPM CA	BENZENE PPM 10'C-600	ACETALD PPM 10'C-600	ACETONE PPM 10'C-600
0011	-----	0.0003	0.006	0.0019
-----	0.142	-----	-----	-----
-----	-----	-----	-----	-----
-----	-----	-----	-----	-----
-----	-----	-----	-----	-----
-----	-----	-----	-----	-----
-----	-----	-----	-----	-----
0038	0.005	0.0003	0.007	0.0022

AFF- 48
PROPENE-NOX CONDITIONING
1980, OCT 24

726: BAG FILLED WITH 50% R.H. PURE AIR.
736: 11 ML NO2 INJECTED
738: 11 ML NO INJECTED
740: 22 ML PROPENE INJECTED
900: UNCOVER BAG (T=0)
1400: RUN OVER. BAG COVERED

T=0 AT 900 PST

BAG NO. 19 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	31.2	3.9	DEG C
UV RAD	EPPLEY	2.334	0.325	MW/CH2

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
2100	PN-1	RM 121; POROPAK N ; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE; FID
1212	D-1212	DASIBI 1212 OZONE MONITOR
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038-2
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479
4130	EPPLEY	ARB LAB; EPPLEY 11692 UV RADIOMETER

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPH D-1212	NO PPH B-NOX-1	NO2-UNC PPH B-NOX-1	NOX-UNC PPH B-NOX-1	PROPENE PPH DMS-1	T DEG C DORIC-1	UV RAD MW/CH2 EPPLEY	ACETALD PPH 10'C-600
1 755	-65	-----	-----	-----	-----	0.483	-----	-----	0.002
1 850	-10	0.000	0.241	0.246	0.494	-----	23.3	-----	-----
1 930	30	0.000	0.196	0.262	0.492	-----	25.8	-----	-----
1 1000	60	0.000	0.147	0.301	0.482	-----	28.0	-----	-----
1 1030	90	0.005	0.108	0.332	0.469	-----	30.0	2.349	-----
1 1100	120	0.012	0.065	0.367	0.452	-----	31.8	2.426	-----
1 1130	150	0.053	0.032	0.388	0.438	-----	33.0	2.607	-----
1 1200	180	0.111	0.019	0.379	0.409	-----	33.5	2.607	-----
1 1230	210	0.196	0.009	0.361	0.381	-----	34.8	2.607	-----
1 1300	240	0.261	0.009	0.342	0.359	-----	34.6	2.349	-----
1 1330	270	0.326	0.010	0.322	0.341	-----	34.3	2.049	-----
1 1400	300	0.378	0.009	0.309	0.327	0.056	34.2	1.680	0.123

----- NO DATA TAKEN

NOTES

A D 1212; NO ZERO OFFSET.

AFF- 49
O3 DECAY
1980,OCT 24-27

DAY 1 (OCT. 24)
BAG FILLED WITH 50% R.H. PURE AIR.
1620: INJECTED 7.5 LITERS ~2.2% O3.
DAY 4 (OCT. 27)
0805: RUN OVER

RESULTS:

OZONE DECAY RATES: FIRST 18.5 HRS. = 0.55 %/HR
LAST 44.9 HRS. = 0.32 %/HR

T=0 AT 1640 PST

BAG NO. 19 USED

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790
1 1640	0	3.597
2 1110	1110	3.247
4 805	3805	2.808

----- NO DATA TAKEN

AFF- 50
PURE AIR PHOTOLYSIS
1980, OCT 29

840: BAG FILLED WITH PURE AIR.
930: UNCOVER BAG (T=0)
935: PUT TEFLON COVER OVER FRAME
940: WEATHER: CLEAR, WARM; SANTA ANA CONDITIONS
1440: RUN OVER.

RESULTS: OZONE FORMATION RATE = 4.2 PPB/HR

T=0 AT 930 PST

BAG NO. 19 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	27.5	7.1	DEG C

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038-2
4850	BK6800-1	BECKMAN HYDROCARBON GC MD 6800 SN100015D
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479
4300	TSI 023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET OPC MD:208 SN76-148
4400	MRI 388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV. ONE CNC MD:RICH100, SN:143
2100	PN-1	RM 121; POROPAK N ; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE; FID
4000	AF ECD-3	AF-LAB; 12' 5% CARBOWAX-600; ECD
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

AFF- 50
PURE AIR PHOTOLYSIS
1980, OCT 29

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	PROPENE PPM DMS-1	PAN PPM AF ECD-3	AER.V UM3/C TSI 02
1 900	-30	-----	-----	-----	-----	0.000	-----	-----
1 920	-10	0.001	0.000	0.000	0.000	-----	0.000	-0.
1 1030	60	0.005	-----	-----	-----	-----	-----	-----
1 1130	120	0.010	-----	-----	-----	-----	-----	-----
1 1230	180	0.013	-----	-----	-----	-----	-----	-----
1 1335	245	0.017	-----	-----	-----	-----	-----	-----
1 1430	300	0.022	0.000	0.000	0.000	0.000	0.000	-1.

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	METHANE PPM BK6800-1	METHANE PPM PN-1	ETHENE PPM PN-1	ETHANE PPM PN-1	ACETYLEN PPM DMS-1	ACETYLEN PPM PN-1	PROPAN PPM DMS-1
1 900	-30	-----	1.49	0.0009	0.0011	0.0003	0.0002	0.001
1 920	-10	1.79	-----	-----	-----	-----	-----	-----
1 1030	60	-----	-----	-----	-----	-----	-----	-----
1 1130	120	-----	-----	-----	-----	-----	-----	-----
1 1230	180	-----	-----	-----	-----	-----	-----	-----
1 1335	245	-----	-----	-----	-----	-----	-----	-----
1 1430	300	-----	1.47	0.0008	0.0010	0.0002	0.0002	0.001

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	HCHO PPM CA	BENZENE PPM 10'C-600	ACETALD PPM 10'C-600	CONDENS 10E3/CC CNC-143	#PART>.3 PART/CC CLIMET	#PART>.5 PART/CC CLIMET	#PART> PART/C CLIME
1 900	-30	-----	0.0001	0.000	-----	-----	-----	-----
1 916	-14	0.002	-----	-----	-----	-----	-----	-----
1 920	-10	-----	-----	-----	0.0 A	0.	0.	0.
1 1030	60	-----	-----	-----	-----	-----	-----	-----
1 1130	120	-----	-----	-----	-----	-----	-----	-----
1 1230	180	-----	-----	-----	-----	-----	-----	-----
1 1335	245	-----	-----	-----	-----	-----	-----	-----
1 1430	300	0.025	0.0001	0.001	0.1	0.	0.	0.

----- NO DATA TAKEN

UNC M X-1	PROPENE PPM DMS-1	PAN PPM AF ECD-3	AER.V UM3/CC TSI 023	AER.N PART/CC TSI 023	AER.S UM2/CC TSI 023	CO PPM BK6800-1	THC PPMC BK6800-1
---	0.000	---	---	---	---	---	---
000	---	0.000	-0.	-124.	-5.	0.37	4.46
---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---
000	0.000	0.000	-1.	770.	-5.	---	---
---	---	---	---	---	---	---	---
ANE M -1	ACETYLEN PPM DMS-1	ACETYLEN PPM PN-1	PROPANE PPM DMS-1	I-C4 PPM DMS-1	N-C4 PPM DMS-1	1-C4= FPM DMS-1	I-C4= PPM DMS-1
011	0.0003	0.0002	0.0017	0.0010	0.001	0.0001	0.0001
---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---
010	0.0002	0.0002	0.0015	0.0009	0.001	0.0001	0.0000
---	---	---	---	---	---	---	---
NS CC 43	#PART>.3 PART/CC CLIMET	#PART>.5 PART/CC CLIMET	#PART>1 PART/CC CLIMET	BSCAT 10-4 N-1 MRI 388	T DEG C DORIC-1	PART.024 PART/CC TSI 023	PART.042 PART/CC TSI 023
---	---	---	---	---	---	---	---
0 A	0.	0.	0.	0.2	22.5	-167.	0.
---	---	---	---	---	---	---	---
1	0.	0.	0.	0.2	32.5	501.	174.

AFF- 50
PURE AIR PHOTOLYSIS
1980, OCT 29

CLOCK	ELAPSED	PART.075	PART.133	PART.237	PART.422	PART.750
TIME	TIME	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
DAY HR.	(MIN)	TSI 023	TSI 023	TSI 023	TSI 023	TSI 023
1 920	-10	44.	0.	12.	-13.	0.
1 1430	300	89.	24.	-25.	13.	-7.

----- NO DATA TAKEN

NOTES

A < .05

B THERE IS NO UV RAD DATA FOR THIS RUN.

AFF- 51
NOX - AIR IRRADIATION
1980, OCT 30

BAG FILLED WITH <10% RH PURE AIR
1032: 6 ML NO2 INJECTED
1034: 18 ML NO INJECTED
1036: .4 ML EACH OF PROPANE AND PROPENE INJECTED
1145: UNCOVER BAG (T=0)
1150: TEFLON COVER PUT OVER FRAME
1155: WEATHER: CLEAR, WARM, SANTA ANA WINDS
1355: RUN OVER
NO OZONE FORMATION OCCURRED.

RESULTS:

CALC. AVG. OH = $30.8 * D \ln(\text{PROPANE}/\text{PROPENE})/DT = \sim 0.02-0.04$ PPT
CALC. RAD INPUT = $16.0 * (\text{AVG. OH}) * (60 + \text{MIN. AVG. NO}_2) = \sim 0.06-0.08$ PPB/MIN
-D (NO)/DT = 0.03 PPB/MIN
AVG. K1 FROM UV RAD DATA = $0.27 (+0.05)/\text{MIN}$

T=0 AT 1145 PST

BAG NO. 19 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	32.5	1.6	DEG C
UV RAD	EPPLEY-1	1.83	0.38	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.404	PPM
NO2-UNC	B-NOX-1	0.133	PPM
PROPANE	DMS-1	0.0106	PPM
PROPENE	DMS-1	0.0089	PPM

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4130	EPPLEY-1	ARB TRAILER; EPPLEY 11692 UV RADIOMETER

AFF- 51
NOX - AIR IRRADIATION
1980, OCT 30

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	PROPANE PPM DMS-1	PROPENE PPM DMS-1	LNC3/C3=	T DEG C DORIC-1
1 1050	-55	-----	-----	-----	0.0112	0.0095	0.1631	-----
1 1125	-20	0.404	0.133	0.532	-----	-----	-----	29.5
1 1145	0	-----	-----	-----	0.0106	0.0089	0.1750	-----
1 1200	15	0.400	0.131	0.526	0.0115	0.0095	0.1863	30.9
1 1215	30	0.401	0.131	0.524	0.0099	0.0085	0.1487	31.1
1 1230	45	0.399	0.131	0.522	0.0105	0.0083	0.2419	32.7
1 1245	60	0.401	0.131	0.524	0.0102	0.0080	0.2414	33.0
1 1300	75	0.401	0.130	0.524	0.0100	0.0077	0.2564	33.8
1 1315	90	0.399	0.126	0.522	0.0095	0.0075	0.2357	34.0
1 1330	105	0.399	0.131	0.521	0.0102	0.0077	0.2784	34.0
1 1345	120	0.399	0.129	0.518	0.0102	0.0074	0.3255	33.6

----- NO DATA TAKEN

OPANE PPM MS-1	PROPENE PPM DMS-1	LNC3/C3=	T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-1	CO PPM BK6800-1	THC PPMC BK6800-1
.0112	0.0095	0.1631	-----	-----	-----	-----
-----	-----	-----	29.5	-----	0.36	1.04
.0106	0.0089	0.1750	-----	-----	-----	-----
.0115	0.0095	0.1863	30.9	2.52	0.28	1.08
.0099	0.0085	0.1487	31.1	1.90	0.36	0.99
.0105	0.0083	0.2419	32.7	2.15	0.35	1.00
.0102	0.0080	0.2414	33.0	1.87	0.38	0.98
.0100	0.0077	0.2564	33.8	1.49	0.39	0.99
.0095	0.0075	0.2357	34.0	1.78	0.37	0.98
.0102	0.0077	0.2784	34.0	1.38	0.46	1.02
.0102	0.0074	0.3255	33.6	1.56	0.39	0.98

AFF- 51
NOX - AIR IRRADIATION
1980, OCT 30

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	METHANE PPH BK6800-1	METHANE PPH PN-1	ETHENE PPH PN-1	ETHANE PPH PN-1	ACETYLEN PPH PN-1	HCHO PPH CA	BENZENE PPH 10'C-600	ACETALD PPH 10'C-600
1 1050	-55	-----	1.48	0.0017	0.0010	0.0003	-----	-----	-----
1 1115	-30	-----	-----	-----	-----	-----	-----	0.0002	0.0062
1 1125	-20	1.37	-----	-----	-----	-----	-----	-----	-----
1 1135	-10	-----	-----	-----	-----	-----	0.010	-----	-----
1 1200	15	1.48	-----	-----	-----	-----	-----	-----	-----
1 1215	30	1.45	-----	-----	-----	-----	-----	-----	-----
1 1230	45	1.48	-----	-----	-----	-----	-----	-----	-----
1 1245	60	1.46	-----	-----	-----	-----	-----	-----	-----
1 1300	75	1.48	-----	-----	-----	-----	-----	-----	-----
1 1315	90	1.48	-----	-----	-----	-----	-----	-----	-----
1 1330	105	1.47	-----	-----	-----	-----	-----	-----	-----
1 1345	120	1.47	1.48	0.0010	0.0012	0.0004	0.007	0.0002	0.0031

----- NO DATA TAKEN

NOTES

A K1 CALCULATED FROM UV RADIOMETER DATA

AFF- 52
JP-10 VARIABLE NOX
1980, NOV 6-7

DAY 1 (NOV. 6)

645: BAG FILLED WITH PURE AIR,
R.H.=21% WET: 6.2 DRY:16.0
659: INJECT 740 MICROLITERS OF JP-10
715: INJECT 300 ML OF FREON 12
800: 2.5 ML NO2 INJECTED INTO SIDE A
802: 7.5 ML NO INJECTED SIDE A
815: 1.26 ML NO2 INJECTED SIDE B
817: 3.76 ML NO INJECTED INTO SIDE B
900: BAG UNCOVERED (T=0) HEAVY FOG
1030: WEATHER: FOG CLEARING, SUN COMING OUT.
1630: BAG COVERED.

DAY 2 (NOV. 7)

900: UNCOVER BAG FOR DAY 2
1530: END RUN.

RESULTS	DAY 1	DAY 2
-----	-----	-----
AVG. T (DEG. C)	19 (+-3)	25 (+-4)
AVG. UV (MW/CM2)	1.1 (+-0.5)	1.5 (+-0.5)

NOTE: JP-10 GC DATA HIGHLY SCATTERED DUE TO INSTRUMENT MALFUCTION.

T=0 AT 900 PST

BAG NO. 19 USED

240

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	20.9	5.2	DEG C	SIDE 1
T	DORIC-1	20.3	4.6	DEG C	SIDE 2
UV RAD	EPPLEY-2	1.26	0.55	MW/CM2	SIDE 1

ID	INST.	INITIAL CONC.	UNITS	
NO	B-NOX-1	0.308	PPM	SIDE 1
NO	B-NOX-1	0.158	PPM	SIDE 2
NO2-UNC	B-NOX-1	0.160	PPM	SIDE 1
NO2-UNC	B-NOX-1	0.097	PPM	SIDE 2
THC	BK6800-1	32.50	PPMC	SIDE 1
THC	BK6800-1	33.20	PPMC	SIDE 2

AFF- 52
JP-10 VARIABLE NOX
1980, NOV 6-7

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
4000	ECD-3	AF-LAB; 12" 5% CARBOWAX-600 GC; ECD
4025	AF DMS	AF-LAB; DIMETHYLSULFOLANE GC; FID
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG

AFF- 52
JP-10 VARIABLE NOX
1980, NOV 6-7

CLOCK TIME DY HR.		ELAPSED TIME (MIN)	SIDE 1 OZONE PPM D-1790	SIDE 2 OZONE PPM D-1790	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE NOX-1 PPM B-NOX-1
1	650	-130	0.000	0.000	0.001	0.001	0.001	0.001	0.001
1	835	-25	0.001	-----	0.308	-----	0.160	-----	0.001
1	845	-15	-----	0.001	-----	0.158	-----	0.097	-----
1	905	5	0.001	-----	0.303	-----	0.158	-----	0.001
1	915	15	-----	0.002	-----	0.156	-----	0.096	-----
1	1005	65	0.002	-----	0.292	-----	0.168	-----	0.001
1	1015	75	-----	0.004	-----	0.147	-----	0.102	-----
1	1105	125	0.003	-----	0.274	-----	0.179	-----	0.001
1	1115	135	-----	0.006	-----	0.136	-----	0.109	-----
1	1205	185	0.005	-----	0.267	-----	0.188	-----	0.001
1	1215	195	-----	0.007	-----	0.129	-----	0.113	-----
1	1305	245	0.004	-----	0.256	-----	0.191	-----	0.001
1	1315	255	-----	0.007	-----	0.121	-----	0.119	-----
1	1405	305	0.003	-----	0.249	-----	0.194	-----	0.001
1	1415	315	-----	0.005	-----	0.114	-----	0.127	-----
1	1505	365	0.003	-----	0.242	-----	0.196	-----	0.001
1	1515	375	-----	0.004	-----	0.109	-----	0.130	-----
1	1605	425	0.001	-----	0.233	-----	0.199	-----	0.001
1	1615	435	-----	0.002	-----	0.105	-----	0.131	-----
2	825	1405	0.000	-----	0.219	-----	0.222	-----	0.001
2	850	1430	-----	0.000	-----	0.101	-----	0.133	-----
2	905	1445	0.005	-----	0.212	-----	0.218	-----	0.001
2	915	1455	-----	0.009	-----	0.100	-----	0.134	-----
2	1005	1505	0.005	-----	0.198	-----	0.229	-----	0.001
2	1015	1515	-----	0.013	-----	0.080	-----	0.147	-----
2	1105	1565	0.007	-----	0.182	-----	0.232	-----	0.001
2	1115	1575	-----	0.018	-----	0.063	-----	0.153	-----
2	1205	1625	0.009	-----	0.172	-----	0.239	-----	0.001
2	1215	1635	-----	0.024	-----	0.049	-----	0.163	-----
2	1305	1685	0.009	-----	0.159	-----	0.250	-----	0.001
2	1315	1695	-----	0.036	-----	0.032	-----	0.180	-----
2	1405	1745	0.009	-----	0.149	-----	0.257	-----	0.001
2	1415	1755	-----	0.054	-----	0.024	-----	0.181	-----
2	1505	1805	0.006	-----	0.140	-----	0.262	-----	0.001
2	1515	1815	-----	0.059	-----	0.021	-----	0.183	-----

----- NO DATA TAKEN

	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1
1	0.001	0.001	0.002	0.002	-----	-----
2	0.160	-----	0.487	-----	-----	-----
3	-----	0.097	-----	0.261	-----	-----
4	0.158	-----	0.483	-----	32.50	-----
5	-----	0.096	-----	0.256	-----	33.20
6	0.168	-----	0.481	-----	32.60	-----
7	-----	0.102	-----	0.255	-----	-----
8	0.179	-----	0.479	-----	32.30	-----
9	-----	0.109	-----	0.250	-----	32.90
10	0.188	-----	0.470	-----	32.30	-----
11	-----	0.113	-----	0.248	-----	32.80
12	0.191	-----	0.469	-----	32.20	-----
13	-----	0.119	-----	0.246	-----	32.90
14	0.194	-----	0.462	-----	32.10	-----
15	-----	0.127	-----	0.246	-----	32.30
16	0.196	-----	0.462	-----	31.90	-----
17	-----	0.130	-----	0.242	-----	32.40
18	0.199	-----	0.459	-----	32.00	-----
19	-----	0.131	-----	0.242	-----	32.30
20	0.222	-----	0.466	-----	32.80	-----
21	-----	0.133	-----	0.241	-----	32.60
22	0.218	-----	0.453	-----	33.00	-----
23	-----	0.134	-----	0.237	-----	32.70
24	0.229	-----	0.451	-----	32.40	-----
25	-----	0.147	-----	0.231	-----	32.80
26	0.232	-----	0.439	-----	32.20	-----
27	-----	0.153	-----	0.218	-----	32.50
28	0.239	-----	0.432	-----	32.00	-----
29	-----	0.163	-----	0.214	-----	32.50
30	0.250	-----	0.429	-----	32.00	-----
31	-----	0.180	-----	0.212	-----	32.20
32	0.257	-----	0.426	-----	31.90	-----
33	-----	0.181	-----	0.203	-----	31.90
34	0.262	-----	0.422	-----	31.70	-----
35	-----	0.183	-----	0.202	-----	31.90

AFF- 52
JP-10 VARIABLE NOX
1980, NOV 6-7

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	SIDE 1 UV RAD MW/CM2 EPPLEY-2	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE #PART>.3 PART/CC CLIME
1 650	-130	13.0	13.0	-----	0.0	0.0	1.	1.
1 835	-25	13.8	-----	-----	0.0	-----	1.	-----
1 845	-15	-----	13.8	-----	-----	0.0	-----	1.
1 905	5	13.8	-----	0.44	0.1	-----	1.	-----
1 915	15	-----	13.6	0.53	-----	0.3	-----	1.
1 1005	65	15.6	-----	0.89	0.3	-----	1.	-----
1 1015	75	-----	15.0	1.16	-----	0.6	-----	1.
1 1105	125	18.4	-----	1.64	0.3	-----	12.	-----
1 1115	135	-----	18.5	1.71	-----	0.5	-----	10.
1 1205	185	21.9	-----	1.73	0.5	-----	52.	-----
1 1215	195	-----	22.4	1.69	-----	0.5	-----	39.
1 1305	245	22.0	-----	1.24	0.5	-----	93.	-----
1 1315	255	-----	21.2	1.45	-----	0.4	-----	67.
1 1405	305	23.5	-----	1.19	0.3	-----	127.	-----
1 1415	315	-----	22.1	0.98	-----	0.4	-----	103.
1 1505	365	22.7	-----	0.63	0.3	-----	142.	-----
1 1515	375	-----	21.0	0.68	-----	0.3	-----	128.
1 1605	425	19.2	-----	0.28	0.3	-----	142.	-----
1 1615	435	-----	17.5	0.68	-----	0.3	-----	135.
2 825	1405	16.0	-----	-----	0.3	-----	43.	-----
2 850	1430	-----	18.5	-----	-----	0.2	-----	15.
2 905	1445	18.2	-----	1.35	0.2	-----	39.	-----
2 915	1455	-----	18.0	1.36	-----	0.3	-----	17.
2 1005	1505	21.6	-----	1.32	0.2	-----	40.	-----
2 1015	1515	-----	22.2	1.34	-----	0.3	-----	15.
2 1105	1565	25.6	-----	2.19	0.2	-----	35.	-----
2 1115	1575	-----	25.6	2.20	-----	0.1	-----	11.
2 1205	1625	28.1	-----	2.00	0.1	-----	30.	-----
2 1215	1635	-----	26.4	2.02	-----	0.1	-----	7.
2 1305	1685	29.0	-----	1.91	0.3	-----	24.	-----
2 1315	1695	-----	26.7	1.74	-----	0.6	-----	7.
2 1405	1745	28.2	-----	1.11	0.1	-----	19.	-----
2 1415	1755	-----	26.2	1.04	-----	0.3	-----	147.
2 1505	1805	25.6	-----	0.63	0.3	-----	15.	-----
2 1515	1815	-----	23.6	0.60	-----	0.3	-----	206.

----- NO DATA TAKEN

DE 1 DENS 3/CC -143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET
0.0	0.0	1.	1.	0.	0.	0.	0.
0.0	-----	1.	-----	0.	-----	0.	-----
-----	0.0	-----	1.	-----	0.	-----	0.
0.1	-----	1.	-----	0.	-----	0.	-----
-----	0.3	-----	1.	-----	0.	-----	0.
0.3	-----	1.	-----	0.	-----	0.	-----
-----	0.6	-----	1.	-----	0.	-----	0.
0.3	-----	12.	-----	0.	-----	0.	-----
-----	0.5	-----	10.	-----	0.	-----	0.
0.5	-----	52.	-----	1.	-----	0.	-----
-----	0.5	-----	39.	-----	1.	-----	0.
0.5	-----	93.	-----	3.	-----	0.	-----
-----	0.4	-----	67.	-----	2.	-----	0.
0.3	-----	127.	-----	7.	-----	0.	-----
-----	0.4	-----	103.	-----	4.	-----	0.
0.3	-----	142.	-----	10.	-----	0.	-----
-----	0.3	-----	128.	-----	6.	-----	0.
0.3	-----	142.	-----	10.	-----	0.	-----
-----	0.3	-----	135.	-----	7.	-----	0.
0.3	-----	43.	-----	1.	-----	0.	-----
-----	0.2	-----	15.	-----	0.	-----	0.
0.2	-----	39.	-----	1.	-----	0.	-----
-----	0.3	-----	17.	-----	0.	-----	0.
0.2	-----	40.	-----	9.	-----	0.	-----
-----	0.3	-----	15.	-----	4.	-----	0.
0.2	-----	35.	-----	8.	-----	0.	-----
-----	0.1	-----	11.	-----	8.	-----	0.
0.1	-----	30.	-----	27.	-----	0.	-----
-----	0.1	-----	7.	-----	6.	-----	0.
0.3	-----	24.	-----	23.	-----	0.	-----
-----	0.6	-----	7.	-----	4.	-----	0.
0.1	-----	19.	-----	18.	-----	0.	-----
-----	0.3	-----	147.	-----	12.	-----	0.
0.3	-----	15.	-----	14.	-----	0.	-----
-----	0.3	-----	206.	-----	27.	-----	0.

AFF- 52
JP-10 VARIABLE NOX
1980, NOV 6-7

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 BSCAT 10-4 M-1 MRI-388	SIDE 2 BSCAT 10-4 M-1 MRI-388	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UM3/CC TSI-023	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE AER.S UM2/CC TSI-023
1 625	-155	-----	-----	-----	-----	-----	-----	-----
1 650	-130	0.7	0.7	0.	0.	358.	358.	2.
1 730	-90	-----	-----	-----	-----	-----	-----	-----
1 835	-25	0.7	-----	0.	-----	113.	-----	3.
1 845	-15	-----	0.8	-----	0.	-----	421.	-----
1 905	5	0.7	-----	-0.	-----	486.	-----	1.
1 915	15	-----	0.8	-----	0.	-----	154.	-----
1 1005	65	0.8	-----	1.	-----	288.	-----	16.
1 1015	75	-----	0.8	-----	2.	-----	1131.	-----
1 1105	125	1.1	-----	3.	-----	282.	-----	53.
1 1115	135	-----	1.2	-----	4.	-----	911.	-----
1 1205	185	1.3	-----	6.	-----	734.	-----	82.
1 1215	195	-----	1.3	-----	7.	-----	1334.	-----
1 1305	245	1.3	-----	6.	-----	928.	-----	80.
1 1315	255	-----	1.4	-----	5.	-----	416.	-----
1 1405	305	1.5	-----	7.	-----	482.	-----	83.
1 1415	315	-----	1.6	-----	12.	-----	712.	-----
1 1505	365	1.6	-----	6.	-----	225.	-----	76.
1 1515	375	-----	1.8	-----	7.	-----	677.	-----
1 1605	425	1.7	-----	3.	-----	444.	-----	48.
1 1615	435	-----	1.8	-----	5.	-----	249.	-----
2 820	1400	-----	-----	-----	-----	-----	-----	-----
2 825	1405	0.8	-----	13.	-----	2.1E 04	-----	350.
2 850	1430	-----	0.8	-----	7.	-----	1.4E 04	-----
2 855	1435	-----	-----	-----	-----	-----	-----	-----
2 905	1445	0.8	-----	8.	-----	1.2E 04	-----	244.
2 915	1455	-----	0.8	-----	9.	-----	2.0E 04	-----
2 1005	1505	1.1	-----	12.	-----	1.3E 04	-----	323.
2 1015	1515	-----	1.0	-----	12.	-----	1.6E 04	-----
2 1105	1565	0.9	-----	6.	-----	6983.	-----	186.
2 1115	1575	-----	0.8	-----	6.	-----	7823.	-----
2 1205	1625	0.8	-----	8.	-----	4631.	-----	148.
2 1215	1635	-----	0.7	-----	6.	-----	5070.	-----
2 1305	1685	0.8	-----	5.	-----	2965.	-----	107.
2 1315	1695	-----	0.8	-----	6.	-----	4522.	-----
2 1405	1745	0.7	-----	4.	-----	2011.	-----	100.
2 1415	1755	-----	1.6	-----	10.	-----	4525.	-----
2 1505	1805	0.8	-----	7.	-----	4827.	-----	164.
2 1515	1815	-----	2.1	-----	11.	-----	8036.	-----

----- NO DATA TAKEN

244

2 V CC 23	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 1 JP-10 RAW DATA VAR 3700	SIDE 2 JP-10 RAW DATA VAR 3700
	358.	358.	2.	2.		
	113.		3.		15.30	15.30
	486.	421.	1.	4.	15.10	
	288.	154.	16.	2.		
	282.	1131.	53.	48.	14.61	21.19
	734.	911.	82.	82.	18.14	
	928.	1334.	80.	105.		
	482.	416.	83.	84.	16.98	18.62
	225.	712.	76.	133.		
	444.	877.	48.	97.	18.58	26.65
		249.		71.		
	2.1E 04		350.		14.57	
		1.4E 04		261.		
	1.2E 04		244.			14.31
	1.3E 04	2.0E 04	323.	316.	25.25	
	6983.	1.6E 04	186.	337.		
	4631.	7823.	148.	192.	20.73	26.41
	2965.	5070.	107.	129.		
	2011.	4522.	100.	142.	21.64	16.14
	4827.	4525.	164.	206.		
		8036.		277.		25.31

AFF- 52
JP-10 VARIABLE NOX
1980, NOV 6-7

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 FREON 12 RAW DATA DMS-1	SIDE 1 FREON 12 RAW DATA AF DMS	SIDE 2 FREON 12 RAW DATA DMS-1	SIDE 2 FREON 12 RAW DATA AF DMS	SIDE 1 CO PPM BK6800-1	SIDE 2 CO PPM BK6800-1	SIDE PAI PPM ECCD
1 625	-155	-----	-----	-----	-----	-----	-----	-----
1 650	-130	-----	-----	-----	-----	-----	-----	0.0
1 730	-90	347.6	-----	347.6	---	-----	-----	-----
1 820	-40	350.7	-----	-----	---	-----	-----	-----
1 835	-25	-----	-----	-----	---	-----	-----	-----
1 843	-17	-----	-----	-----	-----	-----	-----	-----
1 845	-15	-----	-----	-----	-----	-----	-----	-----
1 905	5	-----	-----	-----	-----	2.82	-----	0.0
1 915	15	-----	-----	-----	-----	-----	2.81	-----
1 1005	65	-----	-----	-----	-----	2.87	-----	0.0
1 1015	75	-----	-----	-----	-----	-----	-----	-----
1 1105	125	-----	-----	-----	-----	2.81	-----	0.0
1 1115	135	-----	-----	-----	-----	-----	2.87	-----
1 1200	180	-----	-----	-----	-----	-----	-----	-----
1 1205	185	-----	-----	-----	-----	2.87	-----	0.0
1 1215	195	-----	-----	-----	3.312	-----	2.89	-----
1 1305	245	-----	-----	-----	-----	2.90	-----	0.0
1 1315	255	-----	-----	-----	-----	-----	2.89	-----
1 1405	305	345.6	-----	-----	-----	2.92	-----	0.0
1 1415	315	-----	-----	-----	-----	-----	2.99	-----
1 1505	365	-----	-----	-----	-----	2.99	-----	0.0
1 1515	375	-----	-----	333.8	-----	-----	2.99	-----
1 1605	425	-----	3.300	-----	-----	3.05	-----	0.0
1 1610	430	-----	-----	-----	-----	-----	-----	-----
1 1615	435	-----	-----	-----	3.312	-----	3.00	-----
2 825	1405	-----	-----	-----	-----	2.99	-----	0.0
2 850	1430	-----	-----	-----	3.136	-----	3.02	-----
2 905	1445	-----	3.176	-----	-----	3.00	-----	0.0
2 915	1455	-----	-----	-----	-----	-----	3.01	-----
2 1005	1505	-----	-----	-----	-----	3.01	-----	0.0
2 1015	1515	-----	-----	-----	-----	-----	3.16	-----
2 1105	1565	-----	-----	-----	-----	3.09	-----	0.0
2 1115	1575	-----	-----	-----	-----	-----	3.18	-----
2 1200	1620	-----	-----	-----	-----	-----	-----	-----
2 1205	1625	-----	-----	-----	-----	3.05	-----	0.0
2 1215	1635	-----	-----	-----	3.184	-----	3.36	-----
2 1305	1685	-----	-----	-----	-----	3.15	-----	0.0
2 1315	1695	-----	-----	-----	-----	-----	3.45	-----
2 1405	1745	-----	-----	-----	-----	3.05	-----	0.0
2 1415	1755	-----	-----	-----	-----	-----	3.56	-----
2 1505	1805	-----	3.200	-----	-----	3.18	-----	0.0
2 1510	1810	-----	-----	-----	-----	-----	-----	-----
2 1515	1815	-----	-----	-----	3.172	-----	3.65	-----

----- NO DATA TAKEN

	SIDE 1 CO PPM BK6800-1	SIDE 2 CO PPM BK6800-1	SIDE 1 PAN PPM ECD-3	SIDE 2 PAN PPM ECD-3	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA
2	-----	-----	-----	-----	-----	-----
12	-----	-----	0.000	0.000	-----	-----
STA	-----	-----	-----	-----	-----	-----
15	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	0.012	0.012
	2.82	-----	0.000	-----	-----	-----
	-----	2.81	-----	0.000	-----	-----
	2.87	-----	0.000	-----	-----	-----
	-----	-----	-----	0.000	-----	-----
	2.81	-----	0.000	-----	-----	-----
	-----	2.87	-----	0.000	-----	-----
	2.87	-----	0.000	-----	0.005	-----
2	-----	2.89	-----	0.000	-----	-----
	2.90	-----	0.000	-----	-----	-----
	-----	2.89	-----	0.000	-----	-----
	2.92	-----	0.000	-----	-----	-----
	-----	2.99	-----	0.000	-----	-----
	2.99	-----	0.000	-----	-----	-----
	-----	2.99	-----	0.000	-----	-----
	3.05	-----	0.000	-----	-----	-----
2	-----	-----	-----	-----	0.067	0.047
	-----	3.00	-----	0.000	-----	-----
	2.99	-----	0.000	-----	-----	-----
6	-----	3.02	-----	0.000	0.000	-----
	3.00	-----	0.000	-----	-----	-----
	-----	3.01	-----	0.000	-----	-----
	3.01	-----	0.000	-----	-----	-----
	-----	3.16	-----	0.000	-----	-----
	3.09	-----	0.000	-----	-----	-----
	-----	3.18	-----	0.000	-----	-----
	-----	-----	-----	-----	0.036	0.027
	3.05	-----	0.000	-----	-----	-----
4	-----	3.36	-----	0.000	-----	-----
	3.15	-----	0.000	-----	-----	-----
	-----	3.45	-----	0.000	-----	-----
	3.05	-----	0.000	-----	-----	-----
	-----	3.56	-----	0.000	-----	-----
	3.18	-----	0.000	-----	0.017	0.020
2	-----	3.65	-----	0.001	-----	-----

AFF- 52
JP-10 VARIABLE NOX
1980, NOV 6-7

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023	SIDE 1 PART.042 PART/CC TSI-023	SIDE 2 PART.042 PART/CC TSI-023	SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023	SID PART PART TSI-
1 650	-130	334.	334.	0.	0.	0.	0.	2
1 835	-25	167.	-----	-87.	-----	0.	-----	4
1 845	-15	-----	501.	-----	-87.	-----	0.	---
1 905	5	334.	-----	87.	-----	89.	-----	-2
1 915	15	-----	0.	-----	87.	-----	89.	---
1 1005	65	0.	-----	87.	-----	89.	-----	9
1 1015	75	-----	167.	-----	261.	-----	266.	---
1 1105	125	-167.	-----	87.	-----	133.	-----	9
1 1115	135	-----	167.	-----	87.	-----	133.	---
1 1205	185	334.	-----	87.	-----	0.	-----	14
1 1215	195	-----	668.	-----	174.	-----	44.	---
1 1305	245	668.	-----	-87.	-----	89.	-----	7
1 1315	255	-----	0.	-----	0.	-----	44.	---
1 1405	305	167.	-----	87.	-----	44.	-----	---
1 1415	315	-----	334.	-----	0.	-----	44.	---
1 1505	365	0.	-----	0.	-----	44.	-----	---
1 1515	375	-----	167.	-----	348.	-----	89.	---
1 1605	425	334.	-----	0.	-----	-44.	-----	---
1 1615	435	-----	0.	-----	0.	-----	0.	---
2 825	1405	1.0E 04	-----	3567.	-----	4440.	-----	190
2 850	1430	-----	8684.	-----	435.	-----	3197.	---
2 905	1445	6179.	-----	1392.	-----	2087.	-----	163
2 915	1455	-----	1.1E 04	-----	2784.	-----	3019.	---
2 1005	1505	5010.	-----	2436.	-----	2930.	-----	209
2 1015	1515	-----	8183.	-----	2088.	-----	3552.	---
2 1105	1565	2505.	-----	1044.	-----	1909.	-----	120
2 1115	1575	-----	3173.	-----	1218.	-----	1865.	---
2 1205	1625	2171.	-----	783.	-----	799.	-----	62
2 1215	1635	-----	2505.	-----	783.	-----	844.	---
2 1305	1685	1336.	-----	348.	-----	577.	-----	48
2 1315	1695	-----	1670.	-----	696.	-----	1021.	---
2 1405	1745	334.	-----	348.	-----	577.	-----	53
2 1415	1755	-----	1336.	-----	957.	-----	710.	---
2 1505	1805	2004.	-----	609.	-----	977.	-----	91
2 1515	1815	-----	2839.	-----	870.	-----	2087.	---

----- NO DATA TAKEN

SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023	SIDE 1 PART.133 PART/CC TSI-023	SIDE 2 PART.133 PART/CC TSI-023	SIDE 1 PART.237 PART/CC TSI-023	SIDE 2 PART.237 PART/CC TSI-023
0.	0.	24.	24.	0.	0.
0.	-----	48.	-----	-12.	-----
-----	0.	-----	0.	-----	0.
89.	-----	-24.	-----	0.	-----
-----	89.	-----	-24.	-----	12.
89.	-----	96.	-----	12.	-----
-----	266.	-----	337.	-----	86.
133.	-----	96.	-----	98.	-----
-----	133.	-----	265.	-----	221.
0.	-----	145.	-----	111.	-----
-----	44.	-----	169.	-----	221.
89.	-----	72.	-----	135.	-----
-----	44.	-----	96.	-----	221.
44.	-----	0.	-----	123.	-----
-----	44.	-----	72.	-----	160.
44.	-----	0.	-----	123.	-----
-----	89.	-----	48.	-----	148.
-44.	-----	0.	-----	111.	-----
-----	0.	-----	48.	-----	160.
4440.	-----	1904.	-----	332.	-----
-----	3197.	-----	1639.	-----	394.
2087.	-----	1639.	-----	332.	-----
-----	3019.	-----	1976.	-----	480.
2930.	-----	2097.	-----	443.	-----
-----	3552.	-----	2000.	-----	455.
1909.	-----	1205.	-----	283.	-----
-----	1865.	-----	1205.	-----	332.
799.	-----	627.	-----	197.	-----
-----	844.	-----	699.	-----	209.
577.	-----	482.	-----	185.	-----
-----	1021.	-----	868.	-----	234.
577.	-----	530.	-----	185.	-----
-----	710.	-----	1036.	-----	418.
977.	-----	916.	-----	271.	-----
-----	2087.	-----	1735.	-----	430.

AFF- 52
JP-10 VARIABLE NOX
1980, NOV 6-7

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1	SIDE 2	SIDE 1	SIDE 2
		PART.422 PART/CC TSI-023	PART.422 PART/CC TSI-023	PART.750 PART/CC TSI-023	PART.750 PART/CC TSI-023
1 650	-130	0.	0.	0.	0.
1 835	-25	-7.	-----	4.	-----
1 845	-15	-----	7.	-----	0.
1 905	5	0.	-----	0.	-----
1 915	15	-----	-13.	-----	4.
1 1005	65	0.	-----	4.	-----
1 1015	75	-----	13.	-----	0.
1 1105	125	27.	-----	7.	-----
1 1115	135	-----	33.	-----	4.
1 1205	185	40.	-----	18.	-----
1 1215	195	-----	40.	-----	18.
1 1305	245	33.	-----	18.	-----
1 1315	255	-----	47.	-----	7.
1 1405	305	40.	-----	21.	-----
1 1415	315	-----	67.	-----	35.
1 1505	365	40.	-----	18.	-----
1 1515	375	-----	60.	-----	18.
1 1605	425	40.	-----	4.	-----
1 1615	435	-----	27.	-----	14.
2 825	1405	47.	-----	25.	-----
2 850	1430	-----	47.	-----	0.
2 905	1445	47.	-----	7.	-----
2 915	1455	-----	47.	-----	4.
2 1005	1505	53.	-----	14.	-----
2 1015	1515	-----	47.	-----	18.
2 1105	1565	33.	-----	4.	-----
2 1115	1575	-----	27.	-----	4.
2 1205	1625	33.	-----	21.	-----
2 1215	1635	-----	20.	-----	11.
2 1305	1685	27.	-----	11.	-----
2 1315	1695	-----	27.	-----	7.
2 1405	1745	33.	-----	4.	-----
2 1415	1755	-----	53.	-----	14.
2 1505	1805	40.	-----	11.	-----
2 1515	1815	-----	60.	-----	14.

----- NO DATA TAKEN

NOTES

- A SAMPLE LINE NOT CONNECTED. NO DATA
- B BECKMAN MALFUNCTION
- C LOST SAMPLE, ASSUME 0.0

AFF- 53
JP-10 VS. N-BUTANE
1980 NOVEMBER 18

~530: START FILL. FLOW RATE ~20% LESS THAN BEFORE.
718: INJECTED 5 ML. OF NO2.
720: INJECTED 16 ML. OF NO.
730: END FILL, R.H.=~50%.
730-734: MIX BAG.
740: DIVIDE BAG.
745: INJECTED 125 ML. N-BUTANE INTO SIDE B.
748: MIX SIDE B.
830: INJECTED 294 MICROLITERS JP-10 INTO SIDE A.
845-850: MIX SIDE A.
905: UNCOVER BAG.(T=0)
910: WEATHER: CLEAR AND SUNNY, COOL.
1500: SOME WINDS.
1520: RUN OVER.

AEROSOL FORMATION ON BOTH SIDES WAS NEGLIGABLE.
NOTE: NO JP-10 GC DATA DURING RUN DUE TO INSTRUMENT MALFUNCTION.

T=0 AT 905 PST

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	19.1	4.7	DEG C	SIDE 1
T	DORIC-1	19.2	4.8	DEG C	SIDE 2
UV RAD	EPPLEY-2	1.55	0.53	MW/CM2	SIDE 1

ID	INST.	INITIAL CONC.	UNITS	
NO	B-NOX-1	0.368	PPM	SIDE 1
NO	B-NOX-1	0.376	PPM	SIDE 2
NO2-UNC	B-NOX-1	0.142	PPM	SIDE 1
NO2-UNC	B-NOX-1	0.141	PPM	SIDE 2
THC	BK6800-1	23.50	PPMC	SIDE 1
THC	BK6800-1	29.70	PPMC	SIDE 2
N-C4	DMS-1	7.3120	PPM	SIDE 2

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1770	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2100	PN-1	RM-121 POROPAK-N GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID

AFF- 53
JP-10 VS. N-BUTANE
1980 NOVEMBER 18

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 OZONE PPM D-1790	SIDE 2 OZONE PPM D-1790	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1
1 619	-166	-----	-----	-----	-----	-----	-----	-----	-----
1 655	-130	0.000	0.000	0.001	0.001	0.002	0.002	0.002	0.002
1 757	-68	-----	-----	-----	-----	-----	-----	-----	-----
1 840	-25	-----	0.000	-----	0.376	-----	0.141	-----	-----
1 855	-10	0.000	-----	0.368	-----	0.142	-----	0.000	-----
1 915	10	-----	0.003	-----	0.371	-----	0.149	-----	-----
1 1005	60	0.005	-----	0.349	-----	0.151	-----	0.000	-----
1 1015	70	-----	0.004	-----	0.329	-----	0.176	-----	-----
1 1105	120	0.003	-----	0.339	-----	0.160	-----	0.000	-----
1 1115	130	-----	0.004	-----	0.316	-----	0.199	-----	-----
1 1205	180	0.004	-----	0.322	-----	0.164	-----	0.000	-----
1 1215	190	-----	0.006	-----	0.271	-----	0.221	-----	-----
1 1305	240	0.003	-----	0.311	-----	0.169	-----	0.000	-----
1 1315	250	-----	0.006	-----	0.241	-----	0.242	-----	-----
1 1405	300	0.004	-----	0.301	-----	0.179	-----	0.000	-----
1 1415	310	-----	0.006	-----	0.218	-----	0.260	-----	-----
1 1505	360	0.002	-----	0.291	-----	0.182	-----	0.000	-----
1 1515	370	-----	0.004	-----	0.202	-----	0.278	-----	-----

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	SIDE 1 UV RAD MW/CM2 EPPLEY-2	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET
1 655	-130	8.6	8.6	-----	0.1	0.1	0.	-----
1 840	-25	-----	16.1	-----	-----	0.4	-----	-----
1 855	-10	16.3	-----	-----	0.4	-----	0.	-----
1 915	10	-----	16.6	1.64	-----	0.2	-----	-----
1 1005	60	19.8	-----	2.01	0.2	-----	0.	-----
1 1015	70	-----	20.0	2.13	-----	0.2	-----	-----
1 1105	120	21.0	-----	1.13	0.3	-----	0.	-----
1 1115	130	-----	22.6	1.20	-----	0.1	-----	-----
1 1205	180	22.4	-----	2.05	0.2	-----	1.	-----
1 1215	190	-----	24.0	2.20	-----	0.2	-----	-----
1 1305	240	21.3	-----	1.87	0.3	-----	7.	-----
1 1315	250	-----	22.9	1.79	-----	0.2	-----	-----
1 1405	300	22.9	-----	1.45	0.3	-----	18.	-----
1 1415	310	-----	22.3	1.37	-----	0.2	-----	-----
1 1505	360	20.4	-----	0.65	0.2	-----	15.	-----
1 1515	370	-----	19.8	0.64	-----	0.3	-----	-----

----- NO DATA TAKEN

DE 2 NO PM NOX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BK6900-1	SIDE 2 THC PPMC BK6800-1	SIDE 2 N-C4 PPM DMS-1
001	0.002	0.002	0.003	0.003	0.88	0.88	0.0009
376	0.142	0.141	0.500	0.514	23.50	29.70	7.312
371	0.151	0.149	0.498	0.504	22.60	29.70	
329	0.160	0.176	0.494	0.502	22.60	29.40	6.403
316	0.164	0.199	0.484	0.505	22.40	29.20	6.550
271	0.169	0.221	0.478	0.486	22.50	29.20	6.446
241	0.179	0.242	0.478	0.484	22.40	29.20	6.446
218	0.182	0.260	0.472	0.480	22.30	29.10	6.568
202		0.278		0.480		29.10	

DE 1 SENS S/CC -143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET
0.1	0.1	0.	0.	0.	0.	0.	0.
0.4	0.4	0.	0.	0.	0.	0.	0.
0.2	0.2	0.	0.	0.	0.	0.	0.
0.3	0.1	0.	0.	0.	0.	0.	0.
0.2	0.2	1.	0.	0.	0.	0.	0.
0.3	0.2	7.	0.	0.	0.	0.	0.
0.3	0.2	18.	0.	0.	0.	0.	0.
0.2	0.3	15.	0.	0.	0.	0.	0.

AFF- 53
JP-10 VS. N-BUTANE
1980 NOVEMBER 18

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 BSCAT 10-4 M-1 MRI-388	SIDE 2 BSCAT 10-4 M-1 MRI-388	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UM3/CC TSI-023	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE AER UM2 TSI-
1 619	-166	-----	-----	-----	-----	-----	-----	---
1 655	-130	0.2	0.2	1.	1.	5212.	5212.	3
1 840	-25	-----	0.2	-----	2.	-----	9465.	---
1 855	-10	0.2	-----	2.	-----	1.2E 04	-----	5
1 900	-5	-----	-----	-----	-----	-----	-----	---
1 915	10	-----	0.2	-----	2.	-----	3070.	---
1 1005	60	0.2	-----	0.	-----	2149.	-----	1
1 1015	70	-----	0.2	-----	0.	-----	1915.	---
1 1105	120	0.2	-----	1.	-----	1761.	-----	2
1 1115	130	-----	0.2	-----	1.	-----	1673.	---
1 1205	180	0.2	-----	1.	-----	2188.	-----	2
1 1215	190	-----	0.2	-----	4.	-----	1621.	---
1 1305	240	0.2	-----	1.	-----	2276.	-----	2
1 1315	250	-----	0.2	-----	-0.	-----	1928.	---
1 1405	300	0.2	-----	1.	-----	2077.	-----	3
1 1415	310	-----	0.2	-----	0.	-----	1895.	---
1 1505	360	0.2	-----	1.	-----	467.	-----	1
1 1515	370	-----	0.2	-----	1.	-----	2387.	---

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 I-C5 PPM DMS-1	SIDE 2 I-C5 PPM DMS-1	SIDE 1 N-C5 PPM DMS-1	SIDE 2 N-C5 PPM DMS-1	SIDE 1 CO PPM BK6800-1	SIDE 2 CO PPM BK6800-1	SIDE PA PPM ECD-
1 619	-166	0.0002	0.0002	0.0001	0.0001	-----	-----	---
1 655	-130	-----	-----	-----	-----	0.37	0.37	0.0
1 840	-25	-----	-----	-----	-----	-----	0.48	---
1 855	-10	-----	-----	-----	-----	0.49	-----	---
1 900	-5	0.0001	-----	0.0001	-----	-----	-----	---
1 905	0	-----	-----	-----	-----	-----	-----	---
1 915	10	-----	-----	-----	-----	-----	0.35	---
1 1005	60	-----	-----	-----	-----	0.45	-----	---
1 1015	70	-----	-----	-----	-----	-----	0.52	---
1 1105	120	-----	-----	-----	-----	0.45	-----	0.0
1 1115	130	-----	-----	-----	-----	-----	0.62	---
1 1205	180	-----	-----	-----	-----	0.45	-----	0.0
1 1215	190	-----	-----	-----	-----	-----	0.52	---
1 1305	240	-----	-----	-----	-----	0.48	-----	0.0
1 1315	250	-----	-----	-----	-----	-----	0.54	---
1 1405	300	-----	-----	-----	-----	0.46	-----	---
1 1415	310	-----	-----	-----	-----	-----	0.56	---
1 1500	355	-----	-----	-----	-----	-----	-----	---
1 1505	360	-----	-----	-----	-----	0.49	-----	---
1 1515	370	-----	-----	-----	-----	-----	0.66	---

----- NO DATA TAKEN

	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 1 ETHENE PPM PN-1	SIDE 1 JP-10 RAW DATA VAR 3700
2	-----	-----	-----	-----	0.0045	-----
V	5212.	5212.	37.	37.	-----	-----
CC	-----	9465.	-----	105.	-----	-----
23	1.2E 04	-----	57.	-----	-----	-----
	-----	-----	-----	-----	0.0017	13.10 A
	-----	3070.	-----	35.	-----	-----
	2149.	-----	14.	-----	-----	20.85
	-----	1915.	-----	16.	-----	-----
	1761.	-----	21.	-----	-----	17.17
	-----	1673.	-----	19.	-----	-----
	2188.	-----	22.	-----	-----	18.48
	-----	1621.	-----	47.	-----	-----
	2276.	-----	23.	-----	-----	18.90
	-----	1928.	-----	14.	-----	-----
	20.7.	-----	37.	-----	-----	15.01
	-----	1895.	-----	17.	-----	-----
	467.	-----	15.	-----	0.0017	20.24
	-----	2387.	-----	22.	-----	-----

	SIDE 1 CO PPM BK6800-1	SIDE 2 CO PPM BK6800-1	SIDE 1 PAN PPM ECD-3	SIDE 2 PAN PPM ECD-3	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA	SIDE 2 ACETALD PPM 10'C-600
E 2	-----	-----	-----	-----	-----	-----	0.0022
CS	0.37	0.37	0.000	0.000	-----	-----	-----
M	-----	0.48	-----	0.000	-----	-----	-----
-1	0.49	-----	-----	-----	-----	-----	-----
	-----	-----	-----	-----	0.008	0.002	-----
	-----	0.35	-----	0.000	-----	-----	-----
	0.45	-----	-----	-----	-----	-----	-----
	-----	0.52	-----	-----	-----	-----	-----
	0.45	-----	0.000	-----	0.008	0.015	-----
	-----	0.62	-----	-----	-----	-----	-----
	0.45	-----	0.000	-----	-----	-----	-----
	-----	0.52	-----	-----	-----	-----	-----
	0.48	-----	0.000	-----	-----	-----	-----
	-----	0.54	-----	-----	-----	-----	-----
	0.46	-----	-----	-----	-----	-----	-----
	-----	0.56	-----	-----	-----	-----	0.0203
	-----	-----	-----	-----	0.008	0.006	-----
	0.49	-----	-----	-----	-----	-----	-----
	-----	0.66	-----	-----	-----	-----	-----

AFF- 53
JP-10 VS. N-BUTANE
1980 NOVEMBER 18

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	PROPALD PPM 10'C-600	SIDE 2 ACETONE PPM 10'C-600	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023	SIDE 1 PART.042 PART/CC TSI-023	SIDE 2 PART.042 PART/CC TSI-023	SID PART PART TSI-
1 619	-166	0.0001	0.0007	-----	-----	-----	-----	---
1 655	-130	-----	-----	3841.	3841.	609.	609.	53
1 840	-25	-----	-----	-----	5177.	-----	1653.	---
1 855	-10	-----	-----	9684.	-----	1131.	-----	57
1 915	10	-----	-----	-----	2505.	-----	174.	---
1 1005	60	-----	-----	1503.	-----	348.	-----	178
1 1015	70	-----	-----	-----	1503.	-----	87.	---
1 1105	120	-----	-----	1336.	-----	87.	-----	22
1 1115	130	-----	-----	-----	1169.	-----	174.	---
1 1205	180	-----	-----	1507.	-----	522.	-----	4.
1 1215	190	-----	-----	-----	1002.	-----	261.	---
1 1305	240	-----	-----	1670.	-----	174.	-----	35
1 1315	250	-----	-----	-----	1336.	-----	261.	---
1 1405	300	-----	-----	1002.	-----	261.	-----	57
1 1415	310	-----	0.0015	-----	1336.	-----	174.	---
1 1505	360	-----	-----	0.	-----	174.	-----	178
1 1515	370	-----	-----	-----	1503.	-----	435.	---

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.237 PART/CC TSI-023	SIDE 2 PART.237 PART/CC TSI-023	SIDE 1 PART.422 PART/CC TSI-023	SIDE 2 PART.422 PART/CC TSI-023	SIDE 1 PART.750 PART/CC TSI-023	SIDE 2 PART.750 PART/CC TSI-023
1 655	-130	37.	37.	0.	0.	0.	0.
1 840	-25	-----	160.	-----	-20.	-----	0.
1 855	-10	25.	-----	-7.	-----	7.	-----
1 915	10	-----	25.	-----	-7.	-----	11.
1 1005	60	0.	-----	0.	-----	0.	-----
1 1015	70	-----	0.	-----	7.	-----	0.
1 1105	120	37.	-----	7.	-----	0.	-----
1 1115	130	-----	12.	-----	0.	-----	4.
1 1205	180	49.	-----	-7.	-----	4.	-----
1 1215	190	-----	12.	-----	13.	-----	14.
1 1305	240	25.	-----	0.	-----	4.	-----
1 1315	250	-----	37.	-----	0.	-----	-4.
1 1405	300	62.	-----	7.	-----	0.	-----
1 1415	310	-----	12.	-----	13.	-----	-4.
1 1505	360	12.	-----	7.	-----	0.	-----
1 1515	370	-----	25.	-----	-7.	-----	4.

----- NO DATA TAKEN

NOTES

A FOR JP-10

2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
024	PART.042	PART.042	PART.075	PART.075	PART.133	PART.133
CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
23	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
	609.	609.	533.	533.	193.	193.
	1131.	1653.	577.	1820.	193.	675.
	348.	174.	178.	266.	120.	96.
	87.	87.	222.	222.	72.	96.
	522.	174.	44.	266.	72.	48.
	174.	261.	355.	222.	48.	96.
	261.	261.	577.	178.	169.	121.
	174.	174.	178.	266.	96.	96.
	435.	435.	355.	355.	72.	72.

2	SIDE 1	SIDE 2
422	PART.750	PART.750
CC	PART/CC	PART/CC
23	TSI-023	TSI-023
0.	0.	0.
0.	7.	0.
7.	0.	11.
7.	0.	0.
0.	4.	4.
3.	4.	14.
0.	0.	-4.
3.	0.	-4.
7.	4.	4.

AFF- 54
JP-10 VARIABLE FUEL
1980, DEC. 3-5

DAY 1 (DEC. 3)

605: BAG FILLED WITH PURE AIR.
651: 5 ML NO2 INJECTED. 653: 16 ML NO INJECTED.
705: BAG DIVIDED
718: STARTED INJECTION OF 312 MICROLITERS JP-10 INTO SIDE A
730: SIDE B: DRY BULB TEMP=11.5C; WET BULB TEMP=5.5C; RH=40%
810-825: INJECTION OF 624 MICROLITERS OF JP-10 INTO SIDE B
900: UNCOVERED BAG (T=0)
915: SIDE B DID NOT TURN ON AUTOMATICALLY-MUST DO MANUALLY
THEREFORE COMPUTER READINGS ARE 5 MIN. AHEAD OF NORMAL.
1030: STILL FOGGY BUT BECOMING LIGHTER.
1040: SIDE B WAS NOT SWITCHING ON WHEN IN TIMER MODE BECAUSE THE
TIME PLUG WAS NOT CONNECTED. IT WAS RECONNECTED AND WORKING.
1630: BAG COVERED.

DAY 2 (DEC. 4)

BAG KEPT COVERED ALL DAY DUE TO RAIN.

DAY 3 (DEC. 5)

920: BAG UNCOVERED. WATER INSIDE SIDE B.
1520: RUN OVER.

RESULTS	DAY 1	DAY 2	DAY 3
-----	-----	-----	-----
AVG. T (DEG. C)	16 (+-2)	~10-15	15 (+-1)
AVG. UV RAD (MW/CM2)	0.5 (+-0.3)	(DARK)	0.6 (+-0.2)

NOTE: JP-10 DATA ON VARIAN 3700 HIGHLY SCATTERED DUE TO INSTRUMENT MALFUCTION.
-BYRON DATA CONSIDERED UNRELIABLE AND NOT USED.

T=0 AT 900 PST

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	12.4	2.2	DEG C	SIDE 1
T	DORIC-1	12.8	2.2	DEG C	SIDE 2
UV RAD	EPPLEY-2	0.53	0.27	MW/CM2	SIDE 1

ID	INST.	INITIAL CONC.	UNITS	
NO	B-NOX-1	0.380	PPM	SIDE 1
NO	B-NOX-1	0.373	PPM	SIDE 2
NO2-UNC	B-NOX-1	0.150	PPM	SIDE 1
NO2-UNC	B-NOX-1	0.145	PPM	SIDE 2
THC	BK6800-1	25.10	PPMC	SIDE 1
THC	BK6800-1	45.20	PPMC	SIDE 2
CO	BK6800-1	2.40	PPM	SIDE 1
METHANE	BK6800-1	2.20	PPM	SIDE 1

AFF- 54
JP-10 VARIABLE FUEL
1980, DEC. 3-5

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR:SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR:SN143
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12" 5% CARBOWAX-600 GC; ECD
4250	BYRON	BYRON 401 HYDROCARBON ANALYZER
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG

AFF- 5/
JP-10 VARIABLE FUEL
1980, DEC. 3-5

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1 OZONE PPM D-1790	SIDE 2 OZONE PPM D-1790	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE NOX-1 PPM B-NOX-1
1 630	-150	0.001	-----	0.000	-----	0.000	-----	0.0
1 745	-75	0.002	-----	0.380	-----	0.150	-----	0.5
1 830	-30	-----	0.001	-----	0.373	-----	0.145	-----
1 900	0	0.001	-----	0.349	-----	0.148	-----	0.5
1 920	20	-----	-----	-----	0.359	-----	0.151	-----
1 1000	60	0.004	-----	0.358	-----	0.154	-----	0.5
1 1015	75	-----	0.001	-----	0.350	-----	0.155	-----
1 1100	120	0.001	-----	0.340	-----	0.160	-----	0.5
1 1110	130	-----	0.004	-----	0.338	-----	0.159	-----
1 1200	180	0.003	-----	0.336	-----	0.168	-----	0.5
1 1210	190	-----	0.003	-----	0.332	-----	0.173	-----
1 1300	240	0.006	-----	0.321	-----	0.174	-----	0.4
1 1310	250	-----	0.002	-----	0.315	-----	0.171	-----
1 1400	300	-----	-----	-----	-----	-----	-----	-----
1 1410	310	-----	-----	-----	-----	-----	-----	-----
1 1500	360	0.003	-----	0.304	-----	0.181	-----	0.4
1 1510	370	-----	0.004	-----	0.299	-----	0.189	-----
1 1600	420	0.002	-----	0.298	-----	0.189	-----	0.4
1 1610	430	-----	0.002	-----	0.296	-----	0.191	-----
2 815	1395	0.002	-----	0.257	-----	0.201	-----	0.4
2 830	1410	-----	0.001	-----	0.258	-----	0.209	-----
3 830	2850	0.001	-----	0.210	-----	0.207	-----	0.4
3 840	2860	-----	0.002	-----	0.216	-----	0.225	-----
3 1005	2945	0.006	-----	0.152	-----	0.232	-----	0.4
3 1018	2958	-----	0.007	-----	0.160	-----	0.260	-----
3 1105	3005	0.008	-----	0.122	-----	0.242	-----	0.5
3 1115	3015	-----	0.002	-----	0.136	-----	0.279	-----
3 1205	3065	0.007	-----	0.091	-----	0.261	-----	0.5
3 1215	3075	-----	0.007	-----	0.116	-----	0.287	-----
3 1305	3125	0.011	-----	0.062	-----	0.278	-----	0.5
3 1315	3135	-----	0.007	-----	0.093	-----	0.302	-----
3 1405	3185	0.012	-----	0.043	-----	0.255	-----	0.5
3 1415	3195	-----	0.008	-----	0.082	-----	0.307	-----
3 1505	3245	0.009	-----	0.032	-----	0.225	-----	0.5
3 1515	3255	-----	0.006	-----	0.069	-----	0.308	-----

----- NO DATA TAKEN

	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1
	0.000	-----	0.000	-----	2.20	-----
	0.150	-----	0.525	-----	25.10	-----
373	-----	0.145	-----	0.315	-----	45.20
	0.148	-----	0.510	-----	26.90	-----
359	-----	0.151	-----	0.500	-----	45.20
	0.154	-----	0.500	-----	25.10	-----
350	-----	0.155	-----	0.500	-----	44.60
	0.160	-----	0.500	-----	24.80	-----
338	-----	0.159	-----	0.490	-----	44.20
	0.168	-----	0.500	-----	26.60	-----
332	-----	0.173	-----	0.505	-----	44.20
	0.174	-----	0.495	-----	24.80	-----
315	-----	0.171	-----	0.485	-----	44.20
	-----	-----	-----	-----	24.60	-----
	-----	-----	-----	-----	-----	43.70
	0.181	-----	0.485	-----	24.80	-----
299	-----	0.189	-----	0.485	-----	43.50
	0.189	-----	0.485	-----	24.70	-----
296	-----	0.191	-----	0.490	-----	43.80
	0.201	-----	0.460	-----	25.30	-----
258	-----	0.209	-----	0.465	-----	45.60
	0.207	-----	0.420	-----	25.20	-----
216	-----	0.225	-----	0.440	-----	45.00
	0.232	-----	0.400	-----	25.30	-----
160	-----	0.260	-----	0.442	-----	44.90
	0.242	-----	0.380	-----	25.00	-----
136	-----	0.279	-----	0.437	-----	44.60
	0.261	-----	0.392	-----	25.00	-----
116	-----	0.287	-----	0.419	-----	44.10
	0.278	-----	0.342	-----	24.70	-----
093	-----	0.302	-----	0.411	-----	43.90
	0.255	-----	0.301	-----	24.20	-----
082	-----	0.307	-----	0.401	-----	43.80
	0.225	-----	0.260	-----	22.90	-----
069	-----	0.308	-----	0.387	-----	43.60

AFF- 54
JP-10 VARIABLE FUEL
1980, DEC. 3-5

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	SIDE 1 UV RAD MW/CM2 EPPLEY-2	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SID #PAR PART CLI
1 615	-165	-----	-----	-----	0.3	-----	13.	---
1 630	-150	8.7	-----	-----	-----	-----	-----	---
1 745	-75	9.5	-----	-----	0.3	-----	10.	---
1 830	-30	-----	9.3	-----	-----	0.4	-----	1
1 900	0	9.3	-----	0.15	0.4	-----	11.	---
1 920	20	-----	9.8	0.22	-----	0.5	-----	1
1 1000	60	10.4	-----	0.45	0.4	-----	8.	---
1 1015	75	-----	10.8	0.30	-----	0.5	-----	1
1 1100	120	12.4	-----	0.86	0.2	-----	11.	---
1 1110	130	-----	13.4	0.89	-----	0.4	-----	1
1 1200	180	12.2	-----	0.41	0.6	-----	11.	---
1 1210	190	-----	13.3	0.56	-----	0.8	-----	1
1 1300	240	12.5	-----	0.93	0.6	-----	11.	---
1 1310	250	-----	12.4	0.86	-----	0.7	-----	2
1 1400	300	-----	-----	-----	-----	-----	-----	---
1 1410	310	-----	-----	-----	-----	-----	-----	---
1 1500	360	13.5	-----	0.41	0.5	-----	11.	---
1 1510	370	-----	12.9	0.38	-----	0.4	-----	1
1 1600	420	10.6	-----	0.11	1.5	-----	12.	---
1 1610	430	-----	9.9	0.07	-----	1.6	-----	1
2 815	1395	10.4	-----	-----	0.0	-----	0.	---
2 830	1410	-----	10.6	-----	-----	0.0	-----	---
3 830	2850	13.0	-----	-----	0.0	-----	2.	---
3 840	2860	-----	13.5	-----	-----	0.0	-----	---
3 1005	2945	15.2	-----	1.10	0.0	-----	2.	---
3 1015	2955	-----	-----	-----	-----	0.0	-----	---
3 1018	2958	-----	14.1	0.72	-----	-----	-----	---
3 1105	3005	13.3	-----	0.68	0.2	-----	3.	---
3 1115	3015	-----	13.8	0.62	-----	0.2	-----	---
3 1205	3065	14.7	-----	0.63	0.2	-----	6.	---
3 1215	3075	-----	16.8	0.78	-----	0.0	-----	---
3 1305	3125	15.2	-----	0.60	0.0	-----	7.	---
3 1315	3135	-----	15.4	0.54	-----	0.0	-----	---
3 1405	3185	15.1	-----	0.55	0.2	-----	9.	---
3 1415	3195	-----	14.8	0.45	-----	0.2	-----	---
3 1505	3245	14.7	-----	0.33	0.6	-----	9.	---
3 1515	3255	-----	14.6	0.27	-----	0.2	-----	---

----- NO DATA TAKEN

SIDE 1 CONDENS E3/CC C-143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET
0.3	-----	13.	-----	1.	-----	0.	-----
0.3	-----	10.	-----	1.	-----	0.	-----
0.4	0.4	11.	12.	1.	1.	0.	0.
0.4	0.5	8.	14.	1.	2.	0.	0.
0.4	0.5	11.	12.	1.	1.	0.	0.
0.2	0.4	11.	14.	2.	1.	0.	0.
0.6	0.8	11.	19.	2.	2.	0.	0.
0.6	0.7	11.	20.	2.	2.	0.	0.
0.5	0.4	11.	18.	2.	2.	0.	0.
1.5	1.6	12.	16.	2.	2.	0.	0.
0.0	0.0	0.	0.	0.	0.	0.	0.
0.0	0.0	2.	2.	0.	0.	0.	0.
0.0	0.0	2.	2.	0.	0.	0.	0.
0.2	0.2	3.	4.	0.	0.	0.	0.
0.2	0.0	6.	5.	0.	0.	0.	0.
0.0	0.0	7.	4.	0.	1.	0.	0.
0.2	0.2	9.	5.	0.	1.	0.	0.
0.6	0.2	9.	4.	0.	1.	0.	0.

AFF- 54
JP-10 VARIABLE FUEL
1980, DEC. 3-5

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 BSCAT 10-4 M-1 MRI-388	SIDE 2 BSCAT 10-4 M-1 MRI-388	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UM3/CC TSI-023	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE AER. UM2/ TSI-0
1 615	-165	0.9	-----	3.	-----	4547.	-----	113
1 743	-77	-----	-----	-----	-----	-----	-----	-----
1 745	-75	0.7	-----	8.	-----	5195.	-----	176
1 830	-30	-----	0.8	-----	8.	-----	6892.	-----
1 840	-20	-----	-----	-----	-----	-----	-----	-----
1 900	0	0.6	-----	6.	-----	3940.	-----	146
1 920	20	-----	0.8	-----	7.	-----	6245.	-----
1 1000	60	0.5	-----	6.	-----	3476.	-----	133
1 1015	75	-----	0.7	-----	6.	-----	5437.	-----
1 1100	120	0.6	-----	6.	-----	3173.	-----	126
1 1105	125	-----	-----	-----	-----	-----	-----	-----
1 1110	130	-----	0.8	-----	7.	-----	4111.	-----
1 1200	180	0.7	-----	3.	-----	4888.	-----	56
1 1210	190	-----	0.9	-----	9.	-----	6679.	-----
1 1215	195	-----	-----	-----	-----	-----	-----	-----
1 1300	240	0.8	-----	4.	-----	4225.	-----	120
1 1305	245	-----	-----	-----	-----	-----	-----	-----
1 1310	250	-----	0.8	-----	6.	-----	4634.	-----
1 1400	300	-----	-----	0.	-----	0.	-----	0
1 1410	310	-----	-----	-----	0.	-----	0.	-----
1 1415	315	-----	-----	-----	-----	-----	-----	-----
1 1500	360	0.7	-----	5.	-----	4154.	-----	127
1 1505	365	-----	-----	-----	-----	-----	-----	-----
1 1510	370	-----	0.8	-----	6.	-----	5220.	-----
1 1600	420	0.8	-----	5.	-----	6061.	-----	138
1 1610	430	-----	0.8	-----	7.	-----	6101.	-----
1 1615	435	-----	-----	-----	-----	-----	-----	-----
2 815	1395	0.2	-----	0.	-----	439.	-----	9
2 820	1400	-----	-----	-----	-----	-----	-----	-----
2 830	1410	-----	0.2	-----	1.	-----	1188.	-----
2 920	1460	-----	-----	-----	-----	-----	-----	-----
2 1205	1625	-----	-----	-----	-----	-----	-----	-----
2 1338	1718	-----	-----	-----	-----	-----	-----	-----
2 1505	1805	-----	-----	-----	-----	-----	-----	-----
3 830	2850	0.2	-----	1.	-----	3403.	-----	38
3 840	2860	-----	0.2	-----	0.	-----	4384.	-----
3 923	2903	-----	-----	-----	-----	-----	-----	-----
3 1005	2945	0.2	-----	3.	-----	4393.	-----	75
3 1015	2955	-----	0.2	-----	1.	-----	4178.	-----
3 1105	3005	0.2	-----	0.	-----	4440.	-----	45
3 1115	3015	-----	0.2	-----	-0.	-----	4856.	-----
3 1205	3065	0.2	-----	0.	-----	3973.	-----	28
3 1215	3075	-----	0.2	-----	3.	-----	3306.	-----
3 1305	3125	0.2	-----	1.	-----	2760.	-----	31
3 1310	3130	-----	-----	-----	-----	-----	-----	-----
3 1315	3135	-----	0.2	-----	2.	-----	4390.	-----
3 1405	3185	0.2	-----	2.	-----	3780.	-----	55
3 1415	3195	-----	0.2	-----	1.	-----	4920.	-----
3 1505	3245	0.3	-----	3.	-----	5222.	-----	90
3 1515	3255	-----	0.2	-----	4.	-----	5343.	-----

----- NO DATA TAKEN

	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 1 JP-10 RAW DATA VAR 3700	SIDE 2 JP-10 RAW DATA VAR 3700
	4547.	-----	113.	-----	-----	-----
	-----	-----	-----	-----	19.08	-----
	5195.	-----	176.	-----	-----	-----
	-----	6892.	-----	204.	-----	-----
	-----	-----	-----	-----	-----	25.24
	3940.	-----	146.	-----	-----	-----
	-----	6245.	-----	175.	-----	-----
	3476.	-----	133.	-----	-----	-----
	-----	5437.	-----	142.	-----	42.39
	3173.	-----	126.	-----	-----	-----
	-----	-----	-----	-----	10.91	-----
	-----	4111.	-----	160.	-----	-----
	4888.	-----	56.	-----	-----	-----
	-----	6679.	-----	199.	-----	-----
	-----	-----	-----	-----	-----	32.13
	4225.	-----	120.	-----	-----	-----
	-----	-----	-----	-----	11.62	-----
	-----	4634.	-----	146.	-----	-----
	0.	-----	0.	-----	-----	-----
	-----	0.	-----	0.	-----	-----
	-----	-----	-----	-----	-----	41.83
	4154.	-----	127.	-----	-----	-----
	-----	-----	-----	-----	11.89	-----
	-----	5220.	-----	163.	-----	-----
	6061.	-----	138.	-----	-----	-----
	-----	6101.	-----	167.	-----	-----
	-----	-----	-----	-----	-----	41.45
	439.	-----	9.	-----	-----	-----
	-----	-----	-----	-----	18.20	-----
	-----	1188.	-----	17.	-----	-----
	-----	-----	-----	-----	-----	40.45
	-----	-----	-----	-----	14.60	-----
	-----	-----	-----	-----	17.25	-----
	-----	-----	-----	-----	19.84	-----
	3403.	-----	38.	-----	-----	-----
	-----	4384.	-----	40.	-----	-----
	-----	-----	-----	-----	12.18	-----
	4393.	-----	75.	-----	-----	-----
	-----	4178.	-----	57.	-----	21.47
	4440.	-----	45.	-----	-----	10.76
	-----	4856.	-----	35.	-----	-----
	3973.	-----	28.	-----	-----	-----
	-----	3306.	-----	53.	-----	34.77
	2760.	-----	31.	-----	-----	-----
	-----	-----	-----	-----	0.8628	-----
	-----	4390.	-----	52.	-----	-----
	3780.	-----	55.	-----	-----	37.62
	-----	4920.	-----	42.	-----	-----
	5222.	-----	95.	-----	-----	-----
	-----	5343.	-----	63.	-----	-----

2

AFF- 54
 JP-10 VARIABLE FUEL
 1980, DEC. 3-5

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 CO PPM BYRON	SIDE 1 CO PPM BK6800-1	SIDE 2 CO PPM BYRON	SIDE 2 CO PPM BK6800-1	SIDE 1 PAN PPM ECD-3	SIDE 2 PAN PPM ECD-3	SIDE HCI PPM C/
1 615	-165	-----	-----	-----	-----	-----	-----	-----
1 630	-150	-----	2.80	-----	-----	-----	-----	-----
1 745	-75	1.60	2.50	-----	-----	-----	-----	-----
1 820	-40	-----	-----	-----	-----	-----	-----	0.0
1 830	-30	-----	-----	1.60	2.70	-----	-----	-----
1 840	-20	-----	-----	-----	-----	-----	-----	-----
1 900	0	1.60	2.40	-----	-----	-----	-----	-----
1 920	20	-----	-----	1.60	2.40	-----	-----	-----
1 1000	60	1.60	2.30	-----	-----	0.000	-----	-----
1 1015	75	-----	-----	1.60	2.40	-----	0.000	-----
1 1100	120	1.60	2.40	-----	-----	0.000	-----	-----
1 1110	130	-----	-----	1.70	2.40	-----	0.000	-----
1 1200	180	1.50	2.40	-----	-----	0.000	-----	-----
1 1210	190	-----	-----	2.10	2.40	-----	0.000	0.0
1 1240	220	-----	-----	-----	-----	-----	-----	-----
1 1300	240	1.50	2.40	-----	-----	0.000	-----	-----
1 1310	250	-----	-----	1.60	2.30	-----	0.000	-----
1 1400	300	-----	2.30	-----	-----	0.000	-----	-----
1 1410	310	-----	-----	-----	2.60	-----	-----	-----
1 1500	360	1.60	2.40	-----	-----	0.000	-----	-----
1 1510	370	-----	-----	1.70	2.40	-----	0.000	0.0
1 1600	420	1.50	2.40	-----	-----	0.000	-----	-----
1 1610	430	-----	-----	1.60	2.40	-----	0.000	-----
2 815	1395	-----	2.40	-----	-----	0.000	-----	-----
2 830	1410	-----	-----	1.60	2.50	-----	0.000	-----
3 830	2850	1.70	2.30	-----	-----	0.000	-----	-----
3 840	2860	-----	-----	1.50	2.50	-----	0.000	-----
3 1005	2945	1.30	2.65	-----	-----	-----	-----	-----
3 1015	2955	-----	-----	-----	-----	-----	-----	-----
3 1018	2958	-----	-----	1.70	2.74	-----	-----	-----
3 1105	3005	1.29	2.56	-----	-----	-----	-----	-----
3 1115	3015	-----	-----	-----	2.55	-----	-----	-----
3 1205	3065	-----	2.41	-----	-----	-----	-----	-----
3 1215	3075	-----	-----	1.58	2.52	-----	-----	-----
3 1305	3125	-----	2.44	-----	-----	-----	-----	-----
3 1315	3135	-----	-----	2.15	2.48	-----	-----	-----
3 1405	3185	2.08	2.29	-----	-----	-----	-----	-----
3 1415	3195	-----	-----	2.29	2.63	-----	-----	-----
3 1505	3245	2.08	2.25	-----	-----	-----	-----	-----
3 1515	3255	-----	-----	2.32	2.67	-----	-----	-----

----- NO DATA TAKEN

E 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
0	PAN	PAN	HCHO	HCHO	PART.024	PART.024
M	PPM	PPM	PPM	PPM	PART/CC	PART/CC
00-1	ECD-3	ECD-3	CA	CA	TSI-023	TSI-023
---	---	---	---	---	668.	---
---	---	---	---	---	---	---
---	---	---	---	---	2004.	---
---	---	---	0.025	---	---	---
70	---	---	---	---	---	3006.
---	---	---	---	0.006	---	---
---	---	---	---	---	1336.	---
40	---	---	---	---	---	3507.
---	0.000	---	---	---	1002.	---
40	---	0.000	---	---	---	2672.
---	0.000	---	---	---	1002.	---
40	---	0.000	---	---	---	1503.
---	0.000	---	---	---	3006.	---
40	---	0.000	0.000	---	---	3006.
---	---	---	---	0.013	---	---
---	0.000	---	---	---	1503.	---
30	---	0.000	---	---	---	2004.
---	0.000	---	---	---	---	---
60	---	---	---	---	---	---
---	0.000	---	---	---	1670.	---
40	---	0.000	0.008	---	---	2171.
---	0.000	---	---	---	3507.	---
40	---	0.000	---	0.002	---	2672.
---	0.000	---	---	---	334.	---
50	---	0.000	---	---	---	835.
---	0.000	---	---	---	1837.	---
50	---	0.000	---	---	---	2672.
---	---	---	---	---	2338.	---
---	---	---	---	---	---	2171.
74	---	---	---	---	---	---
---	---	---	---	---	2672.	---
55	---	---	---	---	---	3006.
---	---	---	---	---	2839.	---
52	---	---	---	---	---	2338.
---	---	---	---	---	2004.	---
48	---	---	---	---	---	3006.
---	---	---	---	---	2171.	---
63	---	---	---	---	---	3173.
---	---	---	---	---	3006.	---
67	---	---	---	---	---	3841.

AFF- 54
JP-10 VARIABLE FUEL
1980, DEC. 3-5

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.042 PART/CC TSI-023	SIDE 2 PART.042 PART/CC TSI-023	SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023	SIDE 1 PART.133 PART/CC TSI-023	SIDE 2 PART.133 PART/CC TSI-023	SID PART PART TSI-
1 615	-165	261.	-----	2886.	-----	602.	-----	12
1 745	-75	957.	-----	844.	-----	1060.	-----	28
1 830	-30	-----	870.	-----	1376.	-----	1229.	---
1 900	0	522.	-----	844.	-----	964.	-----	23
1 920	20	-----	348.	-----	977.	-----	1036.	---
1 1000	60	696.	-----	755.	-----	795.	-----	18
1 1015	75	-----	609.	-----	1021.	-----	916.	---
1 1100	120	522.	-----	710.	-----	675.	-----	23
1 1110	130	-----	435.	-----	888.	-----	988.	---
1 1200	180	783.	-----	1066.	-----	-----	-----	---
1 1210	190	-----	870.	-----	1332.	-----	1133.	---
1 1300	240	696.	-----	932.	-----	964.	-----	8
1 1310	250	-----	522.	-----	932.	-----	892.	---
1 1400	300	-----	-----	-----	-----	-----	-----	---
1 1410	310	-----	-----	-----	-----	-----	-----	---
1 1500	360	609.	-----	888.	-----	747.	-----	19
1 1510	370	-----	696.	-----	1110.	-----	868.	---
1 1600	420	522.	-----	932.	-----	819.	-----	23
1 1610	430	-----	870.	-----	1288.	-----	964.	---
2 815	1395	0.	-----	44.	-----	24.	-----	3
2 830	1410	-----	87.	-----	178.	-----	72.	---
3 830	2850	696.	-----	622.	-----	217.	-----	2
3 840	2860	-----	696.	-----	710.	-----	265.	---
3 1005	2945	609.	-----	977.	-----	410.	-----	4
3 1015	2955	-----	696.	-----	888.	-----	337.	---
3 1105	3005	609.	-----	799.	-----	289.	-----	7
3 1115	3015	-----	870.	-----	622.	-----	362.	---
3 1205	3065	435.	-----	488.	-----	145.	-----	8
3 1215	3075	-----	348.	-----	355.	-----	193.	---
3 1305	3125	174.	-----	400.	-----	145.	-----	2
3 1315	3135	-----	522.	-----	710.	-----	96.	---
3 1405	3185	522.	-----	577.	-----	434.	-----	8
3 1415	3195	-----	957.	-----	533.	-----	241.	---
3 1505	3245	435.	-----	1021.	-----	602.	-----	14
3 1515	3255	-----	609.	-----	577.	-----	289.	---

----- NO DATA TAKEN

E 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
.075	PART.133	PART.133	PART.237	PART.237	PART.422	PART.422
/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
---	602.	-----	123.	-----	7.	-----
---	1060.	-----	283.	-----	33.	-----
6.	---	1229.	-----	357.	-----	47.
---	964.	-----	234.	-----	33.	-----
7.	---	1036.	-----	320.	-----	53.
---	795.	-----	185.	-----	33.	-----
1.	---	916.	-----	172.	-----	40.
---	475.	-----	234.	-----	20.	-----
8.	---	988.	-----	246.	-----	40.
---	---	---	---	27.	-----	---
2.	---	1133.	-----	271.	-----	53.
---	964.	-----	86.	-----	40.	-----
2.	---	892.	-----	234.	-----	47.
---	---	---	---	---	---	---
---	747.	-----	197.	-----	40.	-----
0.	---	868.	-----	332.	-----	40.
---	819.	-----	234.	-----	47.	-----
88.	---	964.	-----	271.	-----	27.
---	---	---	---	---	---	---
---	24.	-----	37.	-----	0.	-----
98.	---	72.	-----	12.	-----	0.
---	---	---	---	---	---	---
---	217.	-----	25.	-----	7.	-----
10.	---	265.	-----	37.	-----	7.
---	410.	-----	49.	-----	0.	-----
88.	---	337.	-----	86.	-----	0.
---	289.	-----	74.	-----	0.	-----
22.	---	362.	-----	0.	-----	0.
---	145.	-----	86.	-----	-20.	-----
55.	---	193.	-----	61.	-----	0.
---	145.	-----	25.	-----	13.	-----
10.	---	96.	-----	25.	-----	27.
---	434.	-----	86.	-----	-13.	-----
33.	---	241.	-----	12.	-----	0.
---	602.	-----	148.	-----	7.	-----
77.	---	289.	-----	12.	-----	0.

AFF- 54
JP-10 VARIABLE FUEL
1980, DEC. 3-5

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.750 PART/CC TSI-023	SIDE 2 PART.750 PART/CC TSI-023
1 615	-165	0.	-----
1 745	-75	14.	-----
1 830	-30	-----	7.
1 900	0	7.	-----
1 920	20	-----	4.
1 1000	60	11.	-----
1 1015	75	-----	7.
1 1100	120	11.	-----
1 1110	130	-----	11.
1 1200	180	7.	-----
1 1210	190	-----	14.
1 1300	240	4.	-----
1 1310	250	-----	4.
1 1400	300	-----	-----
1 1410	310	-----	-----
1 1500	360	4.	-----
1 1510	370	-----	4.
1 1600	420	0.	-----
1 1610	430	-----	11.
2 815	1395	0.	-----
2 830	1410	-----	4.
2 830	2850	0.	-----
3 840	2860	-----	-4.
3 1005	2945	11.	-----
3 1015	2955	-----	0.
3 1105	3005	-4.	-----
3 1115	3015	-----	-4.
3 1205	3065	0.	-----
3 1215	3075	-----	11.
3 1305	3125	0.	-----
3 1315	3135	-----	4.
3 1405	3185	4.	-----
3 1415	3195	-----	4.
3 1505	3245	4.	-----
3 1515	3255	-----	14.

----- NO DATA TAKEN

AFF- 55
JP-10, DYNAMIC
1980, DEC 10-12

DAY 1 (DEC 10)

705: BAG FILLED WITH PURE AIR.
705: DEW PT= -7.8C; DRY BULB TEMP= 6.3C
744: INJECT 5.0 ML NO2
746: INJECT 16.0 ML NO
810: INJECT 740 ML JP-10
830: INJECT 400 ML FREON 12
903: BAG UNCOVERED (T=0)
930: DIL#1: 5:00 MIN 1035: DIL#2: 5:00 MIN 1135: DIL#3: 3:13 MIN
1237: DIL#4: 7:00 MIN 1335: DIL#5: 3:00 MIN
1318: DEW PT = -9.0 C
1430: DIL#6: AIR DUMPED FOR 2:00 MIN; FILLED FOR 7:00 MIN
1530: DIL#7: FILLED FOR 8:00 MIN
1610: END DAY 1.

DAY 2 (DEC 11)

950: DIL#1: 2:30 MIN 1030: DIL#2: 4:40 MIN 1130: DIL#3: 3:44 MIN
1235: DIL#4: 3:12 MIN 1330: DIL#5: 0:40 MIN 1435: DIL#6: 4:00 MIN
1530: DIL#7: 4:47 MIN
1608: DEW PT: -9.2 C DRY BULB TEMP: 19.4 C
1610: END DAY 2

DAY 3 (DEC 12)

945: DEW PT: -10.0C
945: DIL#1: 1:02 MIN 1045: DIL#2: 4:00 MIN 1145: DIL#3: ~10 MM
1100: DEW PT: -9.0 C 1200: DEW PT: -7.0 C 1300: DEW PT: -5.0 C
1400: DEW PT: -5.0 C

RESULTS	DAY 1	DAY 2	DAY 3
-----	-----	-----	-----
AVG. T. (DEG. C)	23(+5)	25(+5)	20(+2)
AVG. UV (MW/CM2)	1.1(+0.5)	1.0(+0.5)	0.7(+0.2)
DILUTION FACTOR	0.516	0.521	0.306

NOTES: JP-10 DATA ON VAR 3700 HIGHLY SCATTERED DUE TO INSTRUMENT
MALFUNCTION.
BYRON DATA CONSIDERED UNRELIABLE AND NOT USED.
AEROSOL PARTICLE NUMBER DATA APPEAR TO BE ANOMOLOUSLY HIGH.
ALL TSI-023 DATA SUSPECT.

T=0 AT 903 PST

BAG NO. 19 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	21.6	5.5	DEG C
UV RAD	EPPLEY-2	0.94	0.45	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.337	PPM
NO2-UNC	B-NOX-1	0.122	PPM
THC	BK6800-1	36.00	PPMC

AFF- 55
JP-10, DYNAMIC
1980, DEC 10-12

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR:SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR:SN143
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO; HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12" 5% CARBOWAX-600 GC; ECD
4250	BYRON	BYRON 401 HYDROCARBON ANALYZER
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG

AFF- 55
JP-10, DYNAMIC
1980, DEC 10-12

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM E-NOX-1	NOX-UNC PPM B-NOX-1	THC PPMC BK6800-1	FREON12 RAW DATA DMS-1	T DEG DORIC
1 715	-108	-----	-----	-----	-----	-----	-----	-----
1 730	-93	0.000	0.042	0.008	0.046	0.86	-----	6.
1 845	-18	-----	-----	-----	-----	-----	390.7	-----
1 855	-8	0.000	0.337	0.122	0.481	36.00	-----	12.
1 905	2	0.000	0.328	0.131	0.468	36.10	-----	14.
1 1005	62	0.006	0.277	0.122	0.409	32.90	334.3	19.
1 1105	122	0.003	0.242	0.119	0.372	30.70	303.1	21.
1 1205	182	0.003	0.228	0.125	0.360	29.00	297.0	25.
1 1305	242	0.004	0.186	0.107	0.302	27.10	241.2	27.
1 1405	302	0.003	0.168	0.103	0.281	25.90	239.1	27.
1 1505	362	0.004	0.152	0.097	0.253	23.50	211.5	25.
1 1605	422	0.002	0.142	0.096	0.241	21.30	201.7	21.
2 905	1442	0.001	0.157	0.109	0.272	21.10	270.8	17.
2 940	1477	-----	-----	-----	-----	-----	270.3	-----
2 1005	1502	0.008	0.131	0.109	0.243	19.90	254.5	21.
2 1105	1562	0.018	0.105	0.097	0.203	17.00	219.1	27.
2 1205	1622	0.033	0.087	0.092	0.180	15.40	194.6	29.
2 1305	1682	0.016	0.073	0.091	0.163	14.10	164.9	30.
2 1405	1742	0.014	0.069	0.099	0.163	13.80	173.1	26.
2 1505	1802	0.013	0.058	0.091	0.147	12.50	150.0	25.
2 1605	1862	0.008	0.049	0.089	0.135	11.60	140.8	19.
3 845	2862	-----	-----	-----	-----	-----	137.2	-----
3 900	2877	0.016	0.067	0.082	0.148	11.40	-----	17.
3 905	2882	-----	-----	-----	-----	-----	137.2	-----
3 1005	2942	0.016	0.060	0.081	0.137	11.00	133.1	19.
3 1105	3002	0.020	0.065	0.078	0.138	9.91	123.4	20.
3 1205	3062	0.023	0.063	0.055	0.116	7.03	82.94	21.
3 1305	3122	0.020	0.061	0.050	0.108	7.00	54.53	22.
3 1330	3147	-----	-----	-----	-----	-----	59.39	-----
3 1405	3182	0.018	0.062	0.054	0.110	-----	41.98	20.
3 1505	3242	0.016	0.080	0.057	0.129	6.90	-----	19.

----- NO DATA TAKEN

	THC PPMC BK6800-1	FREON12 RAW DATA DMS-1	T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-2	CONDENS 10E3/CC CNC-143	#PART>.3 PART/CC CLIMET	#PART>.5 PART/CC CLIMET
6	0.86	390.7	6.3		0.0	1.	1.
1	36.00		12.8		0.0	3.	1.
8	36.10		14.2	1.01	0.0	1.	1.
9	32.90	334.3	19.3	1.41	0.0	1.	0.
2	30.70	303.1	21.7	1.05	0.0	1.	0.
0	29.00	297.0	25.0	1.86	0.1	3.	0.
2	27.10	241.2	27.4	1.54	0.0	10.	0.
1	25.90	239.1	27.6	1.10	0.0	12.	0.
3	23.50	211.5	25.1	0.63	0.0	9.	0.
1	21.30	201.7	21.8	0.34	0.0	7.	0.
2	21.10	270.8	17.4	0.91	0.0	0.	0.
		270.3					
3	19.90	254.5	21.0	1.33	0.0	0.	0.
3	17.00	219.1	27.4	0.99	0.0	0.	0.
0	15.40	194.6	29.2	1.69	0.0	0.	0.
3	14.10	164.9	30.2	1.46	0.0	2.	0.
3	13.80	173.1	26.7	1.06	0.0	4.	0.
7	12.50	150.0	25.2	0.55	0.0	4.	0.
6	11.60	140.8	19.4	0.24	0.0	2.	0.
		137.2					
8	11.40		17.8	0.75	0.1	0.	0.
		137.2					
7	11.00	133.1	19.8	0.72	0.0	0.	0.
8	9.91	123.4	20.6	0.72	0.0	3.	0.
6	7.03	82.94	21.7	0.82	0.0	8.	0.
8	7.00	54.53 A	22.4	0.68	0.1	15.	0.
		59.39					
0		41.98	20.9	0.60	0.1	21.	1.
9	6.90		19.0	0.26	0.1	23.	1.

AFF- 55
JP-10, DYNAMIC
1980, DEC 10-12

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	#PART>1 PART/CC CLIMET	BSCAT 10-4 M-1 MRI-388	AER.V UM3/CC TSI-023	AER.N PART/CC TSI-023	AER.S UM2/CC TSI-023	JP-10 RAW DATA 10'C-600	JP- RAW VAR
1 730	-93	-----	0.2	7.	4.5E 04	364.	-----	---
1 845	-18	-----	-----	-----	-----	-----	373.0	12
1 855	-8	0.	0.2	5.	3.5E 04	258.	-----	---
1 905	2	1.	0.3	7.	3.0E 04	237.	-----	---
1 1005	62	0.	0.2	2.	4846.	56.	-----	1.
1 1105	122	0.	0.2	2.	6839.	60.	-----	6.
1 1200	177	-----	-----	-----	-----	-----	-----	---
1 1205	182	0.	0.2	3.	6870.	87.	-----	2.
1 1305	242	0.	0.2	7.	9019.	114.	-----	1.
1 1405	302	0.	0.2	1.	1.0E 04	60.	-----	1.
1 1505	362	0.	0.2	1.	9562.	70.	-----	1.
1 1600	417	-----	-----	-----	-----	-----	-----	---
1 1605	422	0.	0.2	1.	7782.	54.	199.7	1.
2 900	1437	-----	-----	-----	-----	-----	-----	---
2 905	1442	-----	0.3	25.	9.3E 04	1106.	260.1	1.
2 1005	1502	0.	0.2	5.	4.0E 04	216.	-----	4.
2 1105	1562	0.	0.2	2.	5925.	63.	-----	1.
2 1200	1617	-----	-----	-----	-----	-----	-----	---
2 1205	1622	0.	0.2	1.	3709.	31.	-----	1.
2 1305	1682	0.	0.2	2.	7849.	72.	-----	1.
2 1405	1742	0.	0.2	1.	7839.	54.	-----	1.
2 1505	1802	0.	0.2	3.	5291.	55.	-----	1.
2 1602	1859	-----	-----	-----	-----	-----	-----	---
2 1605	1862	0.	0.2	2.	6644.	57.	147.5	---
3 900	2877	0.	0.2	8.	2.6E 04	324.	-----	---
3 905	2882	-----	-----	-----	-----	-----	138.2	0.4
3 935	2912	-----	-----	-----	-----	-----	-----	---
3 1005	2942	0.	0.2	5.	2.1E 04	231.	-----	0.7
3 1105	3002	0.	0.4	15.	2.9E 04	533.	-----	0.7
3 1205	3062	0.	0.4	11.	3.0E 04	469.	-----	0.5
3 1210	3067	-----	-----	-----	-----	-----	-----	---
3 1305	3122	0.	0.4	6.	2.8E 04	257.	-----	0.4
3 1405	3182	0.	0.4	8.	4.2E 04	360.	-----	0.4
3 1505	3242	0.	0.4	14.	5.4E 04	507.	58.11	0.5
3 1510	3247	-----	-----	-----	-----	-----	-----	---

----- NO DATA TAKEN

R.N T/CC -023	AER.S UM2/CC 1SI-023	JP-10 RAW DATA 10'C-600	JP-10 RAW DATA VAR 3700	CO PPM BYRON	CO PPM BK6800-1	PAN PPM ECD-3	HCHO PPM CA
5E 04	364.	-----	-----	2.87	0.53	0.000	-----
-----	-----	373.0	13.31	-----	-----	-----	-----
5E 04	258.	-----	-----	1.50	0.59	0.000	0.000
0E 04	237.	-----	-----	4.47	0.78	0.000	-----
46.	56.	-----	1.668	0.10	0.75	0.000	-----
39.	60.	-----	6.313	0.16	0.66	0.000	-----
-----	-----	-----	-----	-----	-----	-----	0.004
70.	87.	-----	2.117	0.20	0.58	0.000	-----
19.	114.	-----	1.571	-----	0.65	0.000	-----
0E 04	60.	-----	1.524	0.12	0.86	0.000	-----
62.	70.	-----	1.207	-----	0.79	0.000	-----
-----	-----	-----	-----	-----	-----	-----	0.000
82.	54.	199.7	1.381	-----	0.60	0.000	-----
-----	-----	-----	-----	-----	-----	-----	0.006
3E 04	1106.	260.1	1.661	0.10	0.75	0.000	-----
0E 04	216.	-----	4.276	0.10	0.69	0.000	-----
25.	63.	-----	1.380	0.10	0.63	0.000	-----
-----	-----	-----	-----	-----	-----	-----	0.000
09.	31.	-----	1.479	0.17	0.66	0.000	-----
849.	72.	-----	1.195	0.11	0.63	0.000	-----
839.	54.	-----	1.160	0.16	0.65	0.000	-----
291.	55.	-----	1.003	0.05	0.60	0.000	-----
-----	-----	-----	-----	-----	-----	-----	0.000
644.	57.	147.5	-----	0.09	0.60	0.000	-----
-----	-----	-----	-----	-----	-----	-----	-----
6E 04	324.	-----	-----	0.09	0.67	0.000	-----
-----	-----	138.2	0.4059	-----	-----	-----	0.010
-----	-----	-----	-----	-----	-----	-----	-----
1E 04	231.	-----	0.7440	0.09	0.71	0.000	-----
9E 04	533.	-----	0.7583	0.20	0.85	0.000	-----
0E 04	469.	-----	0.5833	1.00	2.10	0.000	-----
-----	-----	-----	-----	-----	-----	-----	0.005
8E 04	257.	-----	0.4610	1.00	2.02	0.000	-----
2E 04	360.	-----	0.4731	1.00	-----	0.000	-----
4E 04	507.	58.11	0.5804	1.27	2.02	0.000	-----
-----	-----	-----	-----	-----	-----	-----	0.006

AFF- 55
JP-10, DYNAMIC
1980, DEC 10-12

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	PART.024 PART/CC TSI-023	PART.042 PART/CC TSI-023	PART.075 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART.237 PART/CC TSI-023	PART.422 PART/CC TSI-023	PART.75 PART/CC TSI-023
1 730	-93	3.0E 04	5742.	6660.	1976.	209.	13.	4.
1 855	-8	2.6E 04	3828.	3996.	1494.	172.	13.	0.
1 905	2	2.1E 04	4263.	3374.	1133.	123.	13.	14.
1 1005	62	2505.	1218.	799.	289.	25.	7.	4.
1 1105	122	4509.	1044.	932.	313.	37.	0.	4.
1 1205	182	668.	4524.	1243.	386.	49.	-7.	7.
1 1305	242	6179.	1653.	710.	362.	74.	20.	21.
1 1405	302	6680.	2958.	222.	361.	86.	-13.	0.
1 1505	362	6680.	1305.	1154.	361.	61.	0.	0.
1 1605	422	5511.	1131.	844.	265.	25.	7.	0.
2 905	1442	5.5E 04	1.4E 04	1.4E 04	7905.	1107.	53.	7.
2 1005	1502	3.2E 04	4524.	2842.	868.	111.	7.	7.
2 1105	1562	3674.	783.	1066.	362.	37.	0.	4.
2 1205	1622	2338.	609.	533.	217.	12.	0.	0.
2 1305	1682	5010.	1305.	1110.	361.	49.	13.	0.
2 1405	1742	5845.	783.	932.	217.	62.	0.	0.
2 1505	1802	4008.	435.	488.	313.	49.	-13.	11.
2 1605	1862	5010.	609.	710.	265.	49.	-7.	7.
3 900	2877	1.4E 04	4785.	5328.	2073.	197.	40.	4.
3 1005	2942	1.2E 04	3741.	3730.	1446.	172.	20.	0.
3 1105	3002	1.4E 04	4176.	6882.	3760.	603.	53.	11.
3 1205	3062	1.6E 04	4437.	6394.	3543.	467.	33.	4.
3 1305	3122	1.9E 04	4263.	3685.	1566.	197.	13.	4.
3 1405	3182	2.8E 04	6264.	5772.	2000.	221.	20.	7.
3 1505	3242	3.5E 04	8439.	7548.	2555.	332.	47.	21.

----- NO DATA TAKEN

AFF- 56
JP-4 SHALE, DYNAMIC
1980, DEC 16, 17

DAY 1 (DEC. 16)

700: BAG FILLED WITH PURE AIR.
800: 5.0 ML NO2 INJECTED
804: 16.0 ML NO INJECTED
810: ~2000 ML FC-12 INJECTED
840-850: 710 MICROLITERS JP4-SHALE INJECTED
910: BAG UNCOVERED (T=0)
945: DIL#1 : 5:03 MIN 1045: DIL#2 : 5:03 MIN
1130: DIL#3: 4:44 MIN 1240: DIL#4: 5:00 MIN
1330: DIL#5: 5:00 MIN 1440: DIL#6: 4:00 MIN
1542: DIL#7: 11:17 MIN
1105: PAN SAMPLE WAS FOUND LOOSE.
1330: BYRON FLAMED OUT, CLIMET QUIT WORKING, DMS FC-12 ANALYSIS
MADE - PARTICLE BEHAVIOR HAS NEVER BEEN EXPLAINED.
1550: COVERED BAG.

DAY 2 (DEC. 17)

TEFLON COVER REMAINS ON ALL DAY.
940: DIL#1: 1:30 1040: DIL#2: 3:13
NO DIL#3
1240: DIL#4: 1:30 MIN 1330: DIL#5: 1:50 MIN
1420: DIL#6: 0:41 MIN
1430: ROLLED UP HALF OF BAG. ALL IN SIDE A NOW.
1630: BAG COVERED. RUN OVER.

RESULTS	DAY 1	DAY 2
-----	-----	-----
AUG. T(DEG.C)	31(+6)	25(+4)
AUG. UV(MW/CM2)	0.9(+0.5)	0.8(+0.3)
DILUTION FACTOR	0.66	0.520

NOTES:-G.C. DATA ON VAR 3700 HIGHLY SCATTERED DUE TO INSTRUMENT
MALFUNCTION.
-BYRON DATA CONSIDERED NOT RELIABLE AND IS NOT USED.
-AEROSOL PARTICLE NUMBER DATA APPEARS TO BE ANOMOLOUSLY HIGH.
ALL TSI-023 DATA SUSPECT.

T=0 AT 910 PST

BAG NO. 19 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	27.3	6.8	DEG C
UV RAD	EPPLEY-2	0.80	0.45	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.330	PPM
NO2-UNC	B-NOX-1	0.100	PPM
THC	BK6800-1	37.10	PPMC

AFF- 56
JP-4 SHALE, DYNAMIC
1980, DEC 16, 17

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD
4025	AF DMS	AF-LAB; DIMETHYLSULFOLANE GC; FID
4250	BYRON	BYRON 401 HYDROCARBON ANALYZER
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART, CTR;SN:76-148
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:15508
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
880	EG&G	EG&G DEW POINT HYGROMETER
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG

AFF- 56
JP-4 SHALE, DYNAMIC
1980, DEC 16, 17

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	THC PPMC BK6800-1	FREON 12 RAW DATA DMS-1	FREON RAW AF
1 725	-105	0.000	0.050	0.010	0.540	2.12	-----	---
1 730	-100	-----	-----	-----	-----	-----	-----	---
1 900	-10	0.004	0.330	0.100	0.439	37.10	2007.	0.6
1 1000	50	0.005	0.271	0.105	0.390	34.60	-----	0.5
1 1005	55	-----	-----	-----	-----	-----	1797.	---
1 1100	110	0.006	0.229	0.120	0.355	33.20	-----	0.5
1 1105	115	-----	-----	-----	-----	-----	1608.	---
1 1200	170	0.009	0.175	0.140	0.330	30.90	-----	0.5
1 1205	175	-----	-----	-----	-----	-----	1674.	---
1 1300	230	0.014	0.155	0.215	0.390	28.90	-----	0.6
1 1305	235	-----	-----	-----	-----	-----	2099.	---
1 1330	260	-----	-----	-----	-----	-----	2007.	---
1 1400	290	0.018	0.095	0.250	0.355	27.80	-----	0.6
1 1500	350	0.024	0.071	0.252	0.335	26.60	-----	0.5
1 1505	355	-----	-----	-----	-----	-----	1756.	---
1 1600	410	0.016	0.060	0.229	0.290	22.90	-----	0.4
1 1605	415	-----	-----	-----	-----	-----	1531.	---
2 830	1400	0.036	0.063	0.194	0.260	22.90	-----	0.4
2 1000	1490	0.089	0.050	0.170	0.220	20.60	-----	0.4
2 1100	1550	0.116	0.050	0.121	0.170	17.20	-----	0.3
2 1200	1610	0.172	0.045	0.115	0.156	17.30	-----	0.3
2 1300	1670	0.195	0.041	0.088	0.129	15.20	-----	0.3
2 1400	1730	0.191	0.042	0.070	0.109	13.00	-----	0.2
2 1500	1790	0.179	0.045	0.055	0.095	12.10	-----	0.2

----- NO DATA TAKEN

NO	THC PPMC	FREON 12 RAW DATA	FREON 12 RAW DATA	DEW PT DEG C	T DEG C	UV RAD MW/CM2	CONDENS 10E3/CC
-1	BK6800-1	DMS-1	AF DMS	EG&G	DORIC-1	EPPLEY-2	CNC-143
40	2.12	-----	-----	-----	13.1	0.03	0.0
	-----	-----	-----	-----	-----	-----	-----
39	37.10	2007.	0.6100	-----	18.6	0.14	0.0
90	34.60	-----	0.5900	-----	25.9	1.18	0.0
	-----	1797.	-----	-----	-----	-----	-----
55	33.20	-----	0.5500	-----	34.4	0.98	0.4
	-----	1608.	-----	-----	-----	-----	-----
60	30.90	-----	0.5100	-1.50	39.0	1.60	0.0
	-----	1674.	-----	-----	-----	-----	-----
90	28.90	-----	0.6400	-3.00	33.1	1.39	0.0
	-----	2099.	-----	-----	-----	-----	-----
	-----	2007.	-----	-----	-----	-----	-----
55	27.80	-----	0.6000	-2.50	32.8	0.98	0.0
35	26.60	-----	0.5700	-2.00	33.1	0.63	0.0
	-----	1756.	-----	-----	-----	-----	-----
90	22.90	-----	0.4000	0.00	28.7	0.28	0.0
	-----	1531.	-----	-----	-----	-----	-----
60	22.90	-----	0.4900	-0.50	17.4	0.56	0.0
20	20.60	-----	0.4560	0.00	23.3	1.18	0.0
70	17.20	-----	0.3610	-1.00	26.5	0.77	0.1
56	17.30	-----	0.3600	-1.00	26.5	1.12	0.0
29	15.20	-----	0.3250	-0.70	27.1	0.91	0.0
09	13.00	-----	0.2750	-0.10	29.1	0.63	0.0
95	12.10	-----	0.2550	0.00	27.5	0.42	0.0

AFF- 56
 JF-4 SHALE, DYNAMIC
 1980, DEC 16, 17

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	#PART>.3 PART/CC CLIMET	#PART>.5 PART/CC CLIMET	#PART>1 PART/CC CLIMET	BSCAT 10-4 M-1 MRI-388	AER.V UM3/CC TSI-023	AER.N PART/CC TSI-023	AER UM2 TSI-
1 725	-105	1.	0.	0.	0.3	4.	2.2E 04	14
1 730	-100	----	----	----	----	----	----	----
1 900	-10	1.	0.	0.	0.3	9.	2.9E 04	27
1 1000	50	0.	0.	0.	0.3	0.	1.1E 04	7
1 1100	110	0.	0.	0.	0.3	2.	8001.	8
1 1200	170	1.	0.	0.	0.2	1.	1.2E 04	6
1 1300	230	0.	0.	0.	0.2	-0.	8752.	4
1 1400	290	0.	0.	0.	0.3	2.	5711.	3
1 1500	350	0.	0.	0.	0.3	-0.	4754.	2
1 1600	410	1.	0.	0.	0.3	2.	5911.	5
2 830	1400	0.	0.	0.	0.2	3.	3.4E 04	17
2 1000	1490	0.	0.	0.	0.2	5.	1.7E 04	21
2 1100	1550	0.	0.	0.	0.3	6.	1.8E 04	27
2 1200	1610	5.	0.	0.	0.7	4.	5227.	13
2 1300	1670	24.	0.	0.	0.9	7.	6774.	16
2 1400	1730	536.	1.	0.	1.0	12.	7454.	23
2 1500	1790	690.	2.	0.	1.0	8.	7664.	19

----- NO DATA TAKEN

	AER.V UM3/CC TSI-023	AER.N PART/CC TSI-023	AER.S UM2/CC TSI-023	N-C4 PPM DMS-1	I-C5 PPM DMS-1	N-C5 PPM VAR 3700	N-C5 PPM DMS-1
-1	4.	2.2E 04	147.	-----	-----	-----	-----
8	-----	-----	-----	0.0016	0.0014	-----	0.0005
	9.	2.9E 04	274.	-----	0.0113	0.0126	0.0126
	0.	1.1E 04	72.	-----	-----	-----	-----
	2.	8001.	89.	-----	-----	-----	-----
	1.	1.2E 04	69.	-----	-----	-----	-----
	-0.	8752.	47.	-----	-----	-----	-----
	2.	5711.	39.	-----	-----	-----	-----
	-0.	4754.	26.	-----	-----	-----	-----
	2.	5911.	51.	-----	-----	-----	-----
	3.	3.4E 04	174.	-----	-----	-----	-----
	5.	1.7E 04	213.	-----	-----	-----	-----
	6.	1.8E 04	275.	-----	-----	-----	-----
	4.	5227.	139.	-----	-----	-----	-----
	7.	6774.	169.	-----	-----	-----	-----
	12.	7454.	235.	-----	-----	-----	-----
	8.	7664.	193.	-----	-----	-----	-----

AFF- 56
 JF-4 SHALE, DYNAMIC
 1980, DEC 16, 17

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	N-C6 PPM VAR 3700	N-C7 PPM VAR 3700	N-C8 PPM VAR 3700	N-C9 PPM VAR 3700	N-C10 PPM VAR 3700	TOLUENE PPM VAR 3700	C PP BYR
1 725	-105	-----	-----	-----	-----	-----	-----	---
1 900	-10	0.0425	0.0397	0.0160	0.0547	0.0750	0.0472	0.
1 925	15	-----	-----	-----	-----	-----	-----	---
1 1000	50	-----	-----	-----	-----	-----	-----	0.
1 1005	55	-----	-----	-----	0.0684	0.0896	0.0533	---
1 1100	110	-----	-----	-----	-----	-----	-----	0.
1 1105	115	-----	-----	-----	0.0614	0.0872	0.0478	---
1 1200	170	-----	-----	-----	-----	-----	-----	0.
1 1205	175	-----	-----	-----	0.0631	0.0861	-----	---
1 1210	180	-----	-----	-----	-----	-----	-----	---
1 1300	230	-----	-----	-----	-----	-----	-----	---
1 1305	235	-----	-----	-----	0.0696	0.0954	0.0524	---
1 1400	290	-----	-----	-----	-----	-----	-----	---
1 1500	350	-----	-----	-----	-----	-----	-----	---
1 1505	355	-----	-----	-----	0.0471	0.0772	0.0517	---
1 1600	410	-----	-----	-----	-----	-----	-----	---
1 1605	415	-----	-----	-----	0.0609	0.0621	-----	---
1 1610	420	-----	-----	-----	-----	-----	-----	---
2 830	1400	-----	-----	-----	-----	-----	-----	0.
2 840	1410	-----	-----	-----	0.0451	0.0708	-----	---
2 905	1435	-----	-----	-----	-----	-----	-----	---
2 1000	1490	-----	-----	-----	-----	-----	-----	0.
2 1005	1495	-----	-----	-----	0.0630	0.0591	0.0480	---
2 1100	1550	-----	-----	-----	-----	-----	-----	0.
2 1105	1555	-----	-----	-----	-----	0.0618	-----	---
2 1200	1610	-----	-----	-----	-----	-----	-----	0.
2 1205	1615	-----	-----	-----	-----	0.0591	-----	---
2 1210	1620	-----	-----	-----	-----	-----	-----	---
2 1300	1670	-----	-----	-----	-----	-----	-----	0.
2 1305	1675	-----	-----	-----	-----	0.0588	-----	---
2 1400	1730	-----	-----	-----	-----	-----	-----	---
2 1405	1735	-----	-----	-----	-----	-----	-----	---
2 1450	1780	-----	-----	-----	-----	-----	-----	---
2 1500	1790	-----	-----	-----	-----	-----	-----	0.
2 1505	1795	-----	-----	-----	-----	0.0543	-----	---

----- NO DATA TAKEN

11 NOV 1981

PAGE 5

C9 PM 3700	N-C10 PPM VAR 3700	TOLUENE PPM VAR 3700	CO PPM BYRON	CO PPM BK6800-1	PAN PPM ECD-3	HCHO PPM CA	PART.024 PART/CC TSI-023
0547	0.0750	0.0472	0.29	0.53 0.64	0.000 0.000	----- -----	1.7E 04 1.9E 04
0684	0.0896	0.0523	0.10	0.60	0.000	0.005	7348.
0614	0.0872	0.0478	0.10	0.71	0.000	-----	4509.
0631	0.0861	-----	0.10	0.61	0.000	-----	9352.
0696	0.0954	0.0524	-----	0.83	0.000	0.022	6513.
0471	0.0772	0.0517	-----	0.60 0.55	0.000 0.001	-----	4676. 3674.
0609	0.0621	-----	-----	0.86	0.001	-----	4342.
0451	0.0708	-----	0.09	0.60	0.003	-----	2.2E 04
0680	0.0591	0.0480	0.10	0.94	0.006	0.028	9185.
00618	0.0618	-----	0.10	1.15	0.007	-----	9352.
00591	0.0591	-----	0.13	1.14	0.011	-----	167.
00588	0.0588	-----	0.10	1.19	0.012	0.045	3006.
00543	0.0543	-----	0.12	1.14	0.014	0.028	3340. 4175.

AFF- 56
JP-4 SHALE, DYNAMIC
1980, DEC 16, 17

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	PART.042 PART/CC TSI-023	PART.075 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART.237 PART/CC TSI-023	PART.422 PART/CC TSI-023	PART.750 PART/CC TSI-023
1 725	-105	2610.	2042.	675.	74.	7.	7.
1 900	-10	4176.	3641.	1976.	-61.	40.	18.
1 1000	50	1566.	1376.	458.	37.	0.	-4.
1 1100	110	1131.	1820.	506.	25.	7.	4.
1 1200	170	1479.	888.	169.	86.	7.	0.
1 1300	230	1218.	755.	193.	74.	7.	-7.
1 1400	290	522.	355.	120.	37.	-7.	7.
1 1500	350	435.	533.	72.	37.	7.	-4.
1 1600	410	609.	666.	241.	49.	0.	4.
2 830	1400	8352.	3064.	362.	25.	7.	4.
2 1000	1490	2958.	3374.	1374.	172.	13.	4.
2 1100	1550	2697.	3818.	2000.	283.	27.	0.
2 1200	1610	1914.	1732.	1374.	37.	-7.	11.
2 1300	1670	1305.	1199.	964.	246.	47.	7.
2 1400	1730	1044.	1465.	1205.	332.	40.	28.
2 1500	1790	957.	1199.	892.	381.	53.	7.

----- NO DATA TAKEN

AFF- 57
JP-4(PET), DYNAMIC
1980 DEC. 18

DAY 1 (DEC 18)

735: BAG FILLED WITH PURE AIR.
756: 5.0 ML NO2 ADDED
759: 15.0 ML NO ADDED
805: 2000 ML FC-12 ADDED
825-840: 710 MICROLITERS JP-4 INJECTED, VERY COLD INJECTION TUBE
SO CONDENSATION PROBABLY OCCURRED.
900: BAG UNCOVERED (T=0)
930: DIL#1: 5:00 MIN 1035: DIL#2: 15:00 MIN 1130: DIL#3: 3:20 MIN
1230: DIL#4: 10:00 MIN 1330: DIL#5: 6:26 MIN 1430: DIL#6: 8:00 MIN
1530: DIL#7: 8:30 MIN
1200: BYRON FLAMEOUT, RELIT
1330: DUMPED SOME AIR OUT OF BAG THROUGH SMALL PORT (FOR ABOUT 30 SEC.)
1425: DUMP 1.5 MIN
1525: DUMP 2 MIN

DAY 2 (DEC 19)

800: BAG VOLUME VERY LOW.
905: NOX RANGE ON BENDIX BACK TO 0-.5 FROM 0-1 PPM.
915: DIL#1: 0:30 MIN 1140: DIL#2: 0:15 MIN
1000: BYRON FLAMED OUT, RELIT.
1106: SAMPLE PUMP DIED. NO READINGS SUDDENLY SHOT UP.
1120: BYRON FLAMED OUT, RELIT.
1150: PUT NOX ANALYZER ON ZERO AIR.
1250: ZEROED NOX
1310: RUN ABORTED BECAUSE BAG EMPTY.

RESULTS	DAY 1	DAY 2 (TO 1310)
-----	-----	-----
AVG.T(DEG.C)	15(+4)	24(+7)
AVG.UV(MW/CM2)	0.8(+0.3)	0.9(+0.3)
DILUTION FACTOR	0.479	0.565

NOTES:-G.C. DATA ON VAR 3700 HIGHLY SCATTERED DUE TO INSTRUMENT MALFUNCTION.
-BYRON DATA CONSIDERED TO BE UNRELIABLE AND IS NOT USED.
-AEROSOL PARTICLE NUMBER DATA IS ANOMOLOUSLY HIGH.
ALL TSI-023 DATA SUSPECT.

T=0 AT 900 PST

BAG NO. 19 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	17.4	7.3	DEG C
UV RAD	EPPLEY-2	0.77	0.36	MW/CM2
DEW PT.	EG&G	-5.1929	2.6722	RAW DATA

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.375	PPM
NO2-UNC	B-NOX-1	0.158	PPM
THC	BK6800-1	31.80	PPMC

AFF- 57
JP-4(PET), DYNAMIC
1980 DEC. 18

INSTRUMENTS USED			SAMPLING RATE (ML/MIN)
ID	LABEL	DESCRIPTION	
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030	
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148	
4400	MRI-388	MRI INTEGRATING NEPHELOMETER MD:1550B	
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143	
1790	D-1790	DASIBI 1790 OZONE MONITOR	
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2	
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D	
880	EG&G	EG&G DEW POINT HYGROMETER	
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479	
4000	ECD-3	AF-LAB; 12' 5% CARBOWAX-600 GC; ECD	
4025	AF DMS	AF-LAB; DIMETHYLSULFOLANE GC; FID	
4250	BYRON	BYRON 401 HYDROCARBON ANALYZER	
2100	PN-1	RM-121 POROPAK-N GC; FID	
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID	
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID	
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID	
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS	
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG	

AFF- 57
JP-4(PET), DYNAMIC
1980 DEC. 18

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	N-C12 PPM VAR 3700	THC PPMC BK6800-1	T DEI DORI
1 715	-105	0.001	0.020	0.001	0.021	-----	1.98	5
1 720	-100	-----	-----	-----	-----	-----	-----	-----
1 850	-10	0.005	0.375	0.158	0.515	-----	31.80	6
1 905	5	-----	-----	-----	-----	0.0000	-----	-----
1 1000	60	0.006	0.291	0.180	0.470	-----	29.10	12
1 1005	65	-----	-----	-----	-----	-----	-----	-----
1 1100	120	0.009	0.182	0.188	0.375	-----	24.30	14
1 1105	125	-----	-----	-----	-----	-----	-----	-----
1 1200	180	0.020	0.110	0.230	0.350	-----	23.40	18
1 1205	185	-----	-----	-----	-----	-----	-----	-----
1 1300	240	0.023	0.069	0.240	0.300	-----	20.80	18
1 1305	245	-----	-----	-----	-----	-----	-----	-----
1 1400	300	0.028	0.032	0.245	0.273	-----	19.80	17
1 1405	305	-----	-----	-----	-----	-----	-----	-----
1 1500	360	0.036	0.020	0.220	0.240	-----	18.00	17
1 1505	365	-----	-----	-----	-----	-----	-----	-----
1 1600	420	0.031	0.010	0.200	0.210	-----	16.30	15
1 1605	425	-----	-----	-----	-----	-----	-----	-----
2 900	1440	0.024	0.011	0.135	0.155	-----	14.80	12
2 905	1445	-----	-----	-----	-----	-----	-----	-----
2 1000	1500	0.051	0.010	0.109	0.125	-----	12.20	21
2 1005	1505	-----	-----	-----	-----	-----	-----	-----
2 1100	1560	0.070	-----	0.114	0.135	-----	12.10	24
2 1105	1565	-----	-----	-----	-----	-----	-----	-----
2 1200	1620	0.089	0.028	0.100	0.122	-----	9.93	29
2 1300	1680	0.081	0.029	0.129	0.151	-----	9.96	28
2 1305	1685	-----	-----	-----	-----	-----	-----	-----

----- NO DATA TAKEN

11 NOV 1981

PAGE 3

UNC M X-1	N-C12 PPM VAR 3700	THC PPMC BK6800-1	T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-2	DEW PT. RAW DATA EG&G	FREON RAW DATA AF DMS	FREON RAW DATA DMS-1
021	-----	1.98	5.1	-----	-3.1000	0.0000	-----
515	-----	31.80	6.3	0.06	-2.5000	0.5850	1812.
470	-----	29.10	12.4	0.98	-6.5000	0.5570	-----
375	-----	24.30	14.7	0.98	-5.0000	0.4450	-----
350	-----	23.40	18.2	1.18	-7.3000	0.4400	-----
300	-----	20.80	18.7	0.98	-7.2000	0.3800	-----
273	-----	19.80	17.6	0.77	-7.5000	0.3510	-----
240	-----	18.00	17.3	0.49	-8.5000	0.3150	-----
210	-----	16.30	15.5	0.21	-9.5000	0.2800	-----
							860.2
155	-----	14.80	12.7	0.42	-3.0000	0.2480	-----
125	-----	12.20	21.6	0.84	-5.0000	0.1950	-----
135	-----	12.10	24.7	1.18	-2.0000	0.1900	-----
122	-----	9.93	29.8	1.05	-0.6000	0.1360	-----
151	-----	9.96	28.7	0.84	-5.0000	0.1400	-----
							431.1

AFF- 57
 JF-4(PET), DYNAMIC
 1980 DEC. 18

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	CONDENS 10E3/CC CNC-143	#PART>.3 PART/CC CLIMET	#PART>.5 PART/CC CLIMET	#PART>1 PART/CC CLIMET	BSCAT 10-4 M-1 MRI-388	AER.V UM3/CC TSI-023	AER PART TSI-
1 715	-105	0.0	0.	0.	0.	0.5	10.	1.7
1 720	-100	-----	-----	-----	-----	-----	-----	-----
1 850	-10	0.0	0.	0.	0.	0.5	9.	1.2
1 1000	60	0.4	0.	0.	0.	0.4	8.	4.4
1 1100	120	0.2	0.	0.	0.	0.6	9.	4.9
1 1200	180	0.2	0.	0.	0.	0.6	15.	3.7
1 1300	240	0.1	0.	0.	0.	0.8	16.	2.3
1 1400	300	0.1	0.	0.	0.	0.8	14.	1.7
1 1500	360	0.0	0.	0.	0.	1.0	18.	1.3
1 1600	420	0.0	0.	0.	0.	1.0	14.	1.4
1 1605	425	-----	-----	-----	-----	-----	-----	-----
2 900	1440	0.0	1.	0.	0.	1.0	8.	356
2 905	1445	-----	-----	-----	-----	-----	-----	-----
2 1000	1500	0.0	0.	0.	0.	1.0	10.	1.1
2 1100	1560	0.0	0.	0.	0.	0.9	12.	1.3
2 1200	1620	0.0	1.	0.	0.	0.8	8.	662
2 1300	1680	0.0	1.	0.	0.	1.0	7.	928
2 1305	1685	-----	-----	-----	-----	-----	-----	-----

----- NO DATA TAKEN

ART>1 RT/CC LIMET	BSCAT 10-4 M-1 MRI-388	AER.V UM3/CC TSI-023	AER.N PART/CC TSI-023	AER.S UM2/CC TSI-023	N-C4 PPM DMS-1	I-C5 PPM DMS-1	N-C5 PPM DMS-1
0.	0.5	10.	1.7E 04	295.	----- 0.0016	----- 0.0010	----- 0.0004
0.	0.5	9.	1.2E 04	254.	----- 0.0084	----- -----	----- 0.0529
0.	0.4	8.	4.4E 04	273.	----- -----	----- -----	----- -----
0.	0.6	9.	4.9E 04	434.	----- -----	----- -----	----- -----
0.	0.6	15.	3.7E 04	557.	----- -----	----- -----	----- -----
0.	0.8	16.	2.3E 04	527.	----- -----	----- -----	----- -----
0.	0.8	14.	1.7E 04	463.	----- -----	----- -----	----- -----
0.	1.0	18.	1.3E 04	455.	----- -----	----- -----	----- -----
0.	1.0	14.	1.4E 04	416.	----- 0.0050	----- 0.0238	----- 0.0254
0.	1.0	8.	3560.	182.	----- 0.0072	----- 0.0236	----- 0.0228
0.	1.0	10.	1.1E 04	240.	----- -----	----- -----	----- -----
0.	0.9	12.	1.3E 04	293.	----- -----	----- -----	----- -----
0.	0.8	8.	6625.	189.	----- -----	----- -----	----- -----
0.	1.0	7.	9288.	179.	----- 0.0081	----- 0.0161	----- 0.0137

AFF- 57
JP-4(PET), DYNAMIC
1980 DEC. 18

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	N-C6 PPM DMS-1	N-C6 PPM VAR 3700	N-C7 PPM VAR 3700	N-C8 PPM VAR 3700	N-C9 PPM VAR 3700	N-C10 PPM VAR 3700	TOLL PPM VAR
1 715	-105	-----	-----	-----	-----	-----	-----	-----
1 720	-100	-----	-----	-----	-----	-----	-----	-----
1 850	-10	0.0919	-----	-----	-----	-----	-----	-----
1 905	5	-----	0.0780	0.0831	0.0924	0.0709	0.0769	0.0
1 1000	60	-----	-----	-----	-----	-----	-----	-----
1 1005	65	-----	0.0716	0.0735	0.0506	0.0613	0.0698	0.0
1 1100	120	-----	-----	-----	-----	-----	-----	-----
1 1105	125	-----	-----	0.0769	0.0514	0.0581	0.0797	-----
1 1200	180	-----	-----	-----	-----	-----	-----	-----
1 1205	185	-----	0.0610	0.0721	0.0787	0.0614	0.0590	-----
1 1210	190	-----	-----	-----	-----	-----	-----	-----
1 1300	240	-----	-----	-----	-----	-----	-----	-----
1 1305	245	-----	0.0575	0.0592	0.0575	-----	-----	-----
1 1400	300	-----	-----	-----	-----	-----	-----	-----
1 1405	305	-----	0.0556	0.0562	0.0533	-----	-----	-----
1 1500	360	-----	-----	-----	-----	-----	-----	-----
1 1505	365	-----	0.0534	0.0538	0.0491	-----	-----	-----
1 1600	420	-----	-----	-----	-----	-----	-----	-----
1 1605	425	0.0446	0.0520	0.0652	0.0516	-----	-----	-----
1 1610	430	-----	-----	-----	-----	-----	-----	-----
2 900	1440	-----	-----	-----	-----	-----	-----	-----
2 905	1445	0.0390	0.0542	0.0613	0.0703	0.0606	-----	-----
2 1000	1500	-----	-----	-----	-----	-----	-----	-----
2 1005	1505	-----	0.0422	0.0497	0.0162	-----	-----	-----
2 1010	1510	-----	-----	-----	-----	-----	-----	-----
2 1100	1560	-----	-----	-----	-----	-----	-----	-----
2 1105	1565	-----	0.0455	0.0477	0.0144	-----	-----	-----
2 1200	1620	-----	-----	-----	-----	-----	-----	-----
2 1210	1630	-----	-----	-----	-----	-----	-----	-----
2 1300	1680	-----	-----	-----	-----	-----	-----	-----
2 1305	1685	0.0208	-----	-----	-----	-----	-----	-----

----- NO DATA TAKEN

-C8 PPM	N-C9 PPM	N-C10 PPM	TOLUENE PPM	M+P-XYL PPM	CO PPM	PAN PPM	HCHO PPM
3700	VAR 3700	VAR 3700	VAR 3700	VAR 3700	BK6800-1	ECD-3	CA
-----	-----	-----	-----	-----	4.14	0.000	-----
-----	-----	-----	-----	-----	4.81	0.000	-----
0924	0.0709	0.0769	0.0587	0.0671	-----	-----	0.016
-----	-----	-----	-----	-----	4.50	0.000	-----
0506	0.0613	0.0698	0.0486	0.1171	-----	-----	-----
-----	-----	-----	-----	-----	4.62	0.000	-----
0514	0.0581	0.0797	-----	0.1107	-----	-----	-----
-----	-----	-----	-----	-----	4.62	0.000	-----
0787	0.0614	0.0590	-----	0.1079	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----	0.013
-----	-----	-----	-----	-----	4.64	0.000	-----
0575	-----	-----	-----	-----	4.58	0.000	-----
-----	-----	-----	-----	-----	4.47	0.000	-----
0533	-----	-----	-----	-----	4.47	0.000	-----
-----	-----	-----	-----	-----	4.16	0.000	-----
0491	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----	0.019
0516	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	4.27	0.000	-----
0703	0.0606	-----	-----	0.0210	-----	-----	-----
-----	-----	-----	-----	-----	4.50	0.000	-----
0162	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----	0.027
-----	-----	-----	-----	-----	4.54	-----	-----
0144	-----	-----	-----	-----	4.85	0.001	-----
-----	-----	-----	-----	-----	-----	-----	0.033
-----	-----	-----	-----	-----	5.05	0.001	-----
-----	-----	-----	-----	-----	-----	-----	-----

AFF- 57
 JP-4(PET), DYNAMIC
 1980 DEC. 18

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	PART.024 PART/CC TSI-023	PART.042 PART/CC TSI-023	PART.075 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART.237 PART/CC TSI-023	PART.422 PART/CC TSI-023	PART.75 PART/CC TSI-023
1 715	-105	9352.	2610.	2842.	1735.	406.	60.	7.
1 850	-10	6346.	1740.	1865.	1591.	357.	53.	11.
1 1000	60	4.0E 04	1218.	1643.	1277.	332.	33.	11.
1 1100	120	2.8E 04	1.2E 04	5950.	2049.	480.	0.	7.
1 1200	180	1.3E 04	1.1E 04	1.0E 04	2434.	541.	80.	11.
1 1300	240	3841.	5568.	9857.	2723.	554.	73.	14.
1 1400	300	3173.	1827.	8170.	3012.	455.	53.	14.
1 1500	360	2004.	2175.	5728.	2940.	443.	73.	32.
1 1600	420	4676.	1044.	5017.	2916.	517.	73.	11.
2 900	1440	1169.	87.	1021.	868.	344.	60.	11.
2 1000	1500	5678.	1479.	1643.	1398.	320.	60.	14.
2 1100	1560	6179.	2523.	1954.	1735.	369.	73.	18.
2 1200	1620	3173.	870.	1376.	795.	357.	40.	14.
2 1300	1680	5845.	1044.	1110.	940.	295.	47.	7.

----- NO DATA TAKEN

AFF- 58
PROPENE-NOX CONDITIONING
1980, JAN 20

0950: START FILL
1030: END FILL
1050: INJECTED 11 ML NO2
1052: INJECTED 11 NL NO
1054: INJECTED 22 ML PROPENE
1130: UNCOVER BAG (T=0)
1530: SUN IS GOING DOWN; SUNLIGHT DIMMER
1635: FLAP OPENED; RUN OVER

T=0 AT 1130 PST

BAG NO. 20 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	19.4	2.6	DEG C
UV RAD	EPPLEY	1.15	0.65	MW/CM2
DEW PT	EG&G	-0.3833	0.4535	DEG C

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038-2
880	EG&G	EG&G DEW POINT HYGROMETER
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479
4130	EPPLEY	ARB LAB; EPPLEY 11692 UV RADIOMETER
2100	PN-1	RM 121; POROPAK N ; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

AFF- 58
PROPENE-NOX CONDITIONING
1980, JAN 20

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	PROPENE PPM DMS-1	T DEG C DORIC-1	UV F MW/C EPPH
1 1110	-20	-----	-----	-----	-----	-----	-----	-----
1 1115	-15	0.002	0.242	0.230	0.495	0.3801	17.1	-----
1 1230	60	0.007	0.189	0.281	0.493	-----	20.2	1.8
1 1330	120	0.010	0.129	0.331	0.481	0.3613	21.8	1.7
1 1430	180	0.019	0.081	0.369	0.459	-----	22.1	1.1
1 1530	240	0.024	0.049	0.401	0.451	-----	19.3	0.6
1 1625	295	-----	-----	-----	-----	-----	-----	-----
1 1630	300	0.020	0.029	0.418	0.443	0.2376	15.7	0.3

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	ACETONE PPM 10'C-600
1 1115	-15	0.0005
1 1630	300	-----

----- NO DATA TAKEN

UNC PM OX-1	PROPENE PPM DMS-1	T DEG C DORIC-1	UV RAD MW/CM2 EPFLEY	DEW PT DEG C EG&G	HCHO PPM CA	ACETALD PPM 10'C-600	PROPALD PPM 10'C-600
----	-----	-----	-----	-----	0.005	-----	-----
.495	0.3801	17.1	-----	-0.3000	-----	0.0036	0.0005
.493	-----	20.2	1.80	-0.1000	-----	-----	-----
.481	0.3613	21.8	1.76	0.0000	-----	-----	-----
.459	-----	22.1	1.17	0.0000	-----	-----	-----
.451	-----	19.3	0.66	-1.0000	-----	-----	-----
----	-----	-----	-----	-----	0.118	-----	-----
.443	0.2376	15.7	0.35	-0.9000	-----	0.0419	-----

AFF- 59
03 DECAY
1981, JAN 21

0820: FILL STARTED
0935: FILL ENDED
955-1005: INJECT ~9.0 LITERS OZONE
END RUN 830, JAN 22

OZONE DECAY RATES:

DAY 1 0.29 %/HR
OVERNIGHT 0.43 %/HR

T=0 AT 1020 PST

BAG NO. 20 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	19.3	3.8	DEG C
DEW PT	EG&G	-0.6667	0.2887	DEG C

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
880	EG&G	EG&G DEW POINT HYGROMETER
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	T DEG C DORIC-1	DEW PT DEG C EG&G
1 1020	0	2.552	15.3	-0.5000
1 1120	60	2.534	17.2	-0.5000
1 1220	120	2.568	21.4	-----
1 1320	180	2.557	23.9	-----
1 1420	240	2.542	24.7	-----
1 1530	310	2.518	19.9	-----
1 1650	390	2.505	17.5	-----
2 820	1320	2.342	14.3	-1.0000

----- NO DATA TAKEN

AFF- 60
PURE AIR PHOTOLYSIS
1981, JAN 22

DAY 1 (JAN 20)
1010: START FILL
1115: END FILL
1143: UNCOVER BAG (T=0)
1530: PLACED TEFLON COVER OVER BAG DUE TO SOME WINDINESS.
DAY 2 (JAN 21)
0830: RUN ENDED.

RESULTS: MAX. OZONE FORMATION RATE = 4.4 PPB/HR

T=0 AT 1143 PST

BAG NO. 20 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	17.5	8.1	DEG C
UV RAD	EPPLEY	0.86	0.52	MW/CM2
HCHO	CA	0.010	0.002	PPM

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038-2
880	EG&G	EG&G DEW POINT HYGROMETER
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE; FID
2100	PN-1	RM 121; POROPAK N ; FID
4850	BK6800-1	BECKMAN HYDROCARBON GC MD 6800 SN100015D
4130	EPPLEY	ARB LAB; EPPLEY 11692 UV RADIOMETER
4300	TSI 023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET OPC MD:208 SN76-148
4200	CNC-143	ENV. ONE CNC MD:RICH100, SN:143
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

AFF- 60
PURE AIR PHOTOLYSIS
1981, JAN 22

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM F-NOX-1	NOX-UNC PPM B-NOX-1	THC PPMC BK6800-1	T DEG C DORIC-1	DEW PP EG
1 1130	-13	0.004	0.000	0.000	0.000	1.64	23.3	-4.0
1 1215	32	0.013	-----	-----	-----	-----	-----	---
1 1245	62	0.014	-----	-----	-----	-----	-----	---
1 1315	92	0.010	-----	-----	-----	-----	-----	---
1 1345	122	0.011	-----	-----	-----	-----	-----	---
1 1415	152	-----	-----	-----	-----	-----	-----	---
1 1445	182	-----	-----	-----	-----	-----	-----	---
1 1515	212	0.019	-----	-----	-----	-----	-----	---
1 1545	242	0.028	-----	-----	-----	-----	-----	---
1 1615	272	0.021	-----	-----	-----	-----	-----	---
1 1645	302	0.026	-----	-----	-----	-----	-----	---
2 830	1247	0.012	0.012	0.000	0.012	1.93	11.8	-2.8

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	CO PPM BK6800-1	HCHO PPM CA	N-C5 PPM AMS-1	ACETALD PPM 10'C-600	ACETONE PPM 10'C-600	CONDENS 10E3/CC CNC-143	#PAR PART CLI
1 1120	-23	-----	0.008	-----	-----	-----	-----	---
1 1130	-13	2.13	-----	-----	-----	-----	0.0	---
1 1135	-8	-----	-----	-----	0.00475	0.0006	-----	---
2 830	1247	2.40	0.012	-----	-----	-----	0.0	---
2 835	1252	-----	-----	0.0002	0.01928	0.0007	-----	---

----- NO DATA TAKEN

UNC PM DX-1	THC PPMC BK6800-1	T DEG C DORIC-1	DEW PT PPM EG&G	UV RAD MW/CM2 EPPLEY	AER.V UM3/CC TSI 023	AER.N PART/CC TSI 023	AER.S UM2/CC TSI 023
0.000	1.64	23.3	-4.0000	-----	-1.	176.	-4.
-----	-----	-----	-----	1.44	-----	-----	-----
-----	-----	-----	-----	1.45	-----	-----	-----
-----	-----	-----	-----	1.39	-----	-----	-----
-----	-----	-----	-----	1.18	-----	-----	-----
-----	-----	-----	-----	1.26	-----	-----	-----
-----	-----	-----	-----	0.91	-----	-----	-----
-----	-----	-----	-----	0.59	-----	-----	-----
-----	-----	-----	-----	0.56	-----	-----	-----
-----	-----	-----	-----	0.28	-----	-----	-----
-----	-----	-----	-----	0.21	-----	-----	-----
0.012	1.93	11.8	-2.8000	0.14	1.	48.	7.
TALD PM C-600	ACETONE PPM 10'C-600	CONDENS 10E3/CC CNC-143	#PART>.3 PART/CC CLIMET	#PART>.5 PART/CC CLIMET	#PART>1 PART/CC CLIMET	PART.024 PART/CC TSI 023	PART.042 PART/CC TSI 023
-----	-----	-----	-----	-----	-----	-----	-----
00475	0.0006	0.0	0.	0.	0.	167.	0.
-----	-----	-----	-----	-----	-----	-----	-----
01928	0.0007	0.0	0.	0.	0.	0.	0.
-----	-----	-----	-----	-----	-----	-----	-----

AFF- 60
PURE AIR PHOTOLYSIS
1981, JAN 22

CLOCK	ELAPSED	PART.075	PART.133	PART.237	PART.422	PART.750
TIME	TIME	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
DY HR.	(MIN)	TSI 023	TSI 023	TSI 023	TSI 023	TSI 023

1	1130	-13	0.	0.	12.	0.	-4.
2	830	1247	44.	0.	0.	0.	4.

----- NO DATA TAKEN

AFF- 61
NOX - AIR IRRADIATION
1981 FEB. 3

0821: FILLED BAG WITH ~ 20% R.H. PURE AIR.
0949: INJECT 6 ML. NO2
0951: INJECT 6 ML. NO
0953: INJECT 0.4 ML. PROPANE
0955: INJECT 0.4 ML. PROPENE
1030: START HCHO SAMPLE
1052: INJECTED 12.0 MORE ML. OF NO
TO MAKE TOTAL NO=18.0 ML.
1115: UNCOVERED BAG (T=0)
1325: RUN OVER, BAG COVERED

RESULTS:

CALC. AVG. OH = $30.6 * D \ln(\text{PROPANE}/\text{PROPENE})/DT = 0.02 \text{ PPT}$
CALC. RAD. INPUT = $16.0 * (\text{AVG.OH}) * (60+\text{MIN.AVG.NO2}) = 0.05 \text{ PPB/MIN}$
NO OXIDATION RATE NEGLIGABLE
AVG. K1 CALCULATED FROM UV RAD DATA = $0.37(+0.05)/\text{MIN}$

T=0 AT 1115 PST

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	22.2	1.3	DEG C
DEW PT	EG&G	-1.5000	0.0000	DEG C
UV RAD	EPPLEY	2.48	0.33	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.418	PPM
NO2-UNC	B-NOX-1	0.160	PPM
PROPANE	DMS-1	0.0110	PPM
PROPENE	DMS-1	0.0097	PPM

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX NOX ANALYZER MDB101EX SN300038-2
4850	BK6800-1	BECKMAN HYDROCARBON GC MD 6800 SN100015D
880	EG&G	EG&G DEW POINT HYGROMETER
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479
4130	EPPLEY	ARB LAB; EPPLEY 11692 UV RADIOMETER
2200	DMS-1	RM-121; DIMETHYLSULFOLANE; FID
2100	PN-1	RM 121; POROPAK N ; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

AFF- 61
NOX - AIR IRRADIATION
1981 FEB. 3

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	PROPANE PPM DMS-1	PROPENE PPM DMS-1	LNC3/C
1 1045	-30	-----	-----	-----	-----	0.0117	0.0100	-----
1 1105	-10	0.000	0.418	0.158	0.562	-----	-----	-----
1 1108	-7	-----	-----	-----	-----	0.0110	0.0097	-----
1 1115	0	0.000	0.418	0.160	0.564	-----	-----	0.153
1 1130	15	0.001	0.417	0.160	0.564	0.0113	0.0097	0.154
1 1145	30	0.000	0.419	0.159	0.564	0.0118	0.0098	0.187
1 1200	45	0.001	0.418	0.159	0.562	0.0119	0.0097	0.203
1 1215	60	0.001	0.415	0.156	0.560	0.0118	0.0095	0.219
1 1230	75	0.001	0.416	0.153	0.561	0.0117	0.0093	0.234
1 1245	90	0.002	0.418	0.153	0.561	0.0120	0.0094	0.247
1 1300	105	0.001	0.417	0.152	0.560	0.0119	0.0092	0.255
1 1315	120	0.001	0.417	0.151	0.558	0.0119	0.0092	0.260

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	CO PPM BK6800-1	HCHO PPM CA	ACETALD PPM 10'C-600	PROPALD PPM 10'C-600	ACETONE PPM 10'C-600
1 820	-175	-----	0.015	-----	-----	-----
1 1045	-30	-----	-----	0.00576	0.0000	0.0007
1 1105	-10	1.04	-----	-----	-----	-----
1 1115	0	1.07	-----	-----	-----	-----
1 1130	15	1.05	-----	-----	-----	-----
1 1145	30	1.15	-----	-----	-----	-----
1 1200	45	1.12	-----	-----	-----	-----
1 1215	60	1.15	-----	-----	-----	-----
1 1230	75	1.33	-----	-----	-----	-----
1 1245	90	1.18	-----	-----	-----	-----
1 1300	105	1.21	-----	-----	-----	-----
1 1315	120	1.21	0.004	0.00397	0.0002	0.0010

----- NO DATA TAKEN

NOTES

A K1 CALCULATED FROM UV RADIOMETER DATA

12 NOV 1981
PAGE 2

-UNC PM OX-1	PROPANE PPM DMS-1	PROPENE PPM DMS-1	LNC3/C3= DORIC-1	T DEG C DORIC-1	DEW PT DEG C EG&G	UV RAD MW/CM2 EPPLEY	THC PPMC BK6800-1
-----	0.0117	0.0100	-----	-----	-----	-----	-----
.562	-----	-----	-----	19.8	-1.5000	-----	1.23
-----	0.0110	0.0097	-----	-----	-----	-----	-----
.564	-----	-----	0.1537	20.7	-1.5000	1.66	1.41
.564	0.0113	0.0097	0.1542	21.4	-----	2.47	1.25
.564	0.0118	0.0098	0.1871	22.1	-----	2.64	1.24
.562	0.0119	0.0097	0.2032	22.1	-----	2.80	1.26
.560	0.0118	0.0095	0.2155	22.4	-----	2.61	1.24
.561	0.0117	0.0093	0.2343	23.1	-----	2.54	1.21
.561	0.0120	0.0094	0.2475	23.3	-----	2.66	1.19
.560	0.0119	0.0092	0.2557	23.8	-----	2.48	1.23
.558	0.0119	0.0092	0.2603	23.4	-1.5000	2.44	1.20

PALD
PM
C-600

ACETONE
PPM
10'C-600

-----	-----
0000	0.0007
-----	-----
-----	-----
-----	-----
-----	-----
-----	-----
-----	-----
-----	-----
0002	0.0010

2

AFF- 62
JP-4 (PET) VS UNLEADED GASOLINE
1981, FEB 5,6

DAY 1 (FEB 5)

0625: BAG FILLED WITH PURE AIR
0610: DEW PT: -4C RH= 53%
0641: INJECTED 5.0 ML NO2
0643: INJECTED 16.0 ML NO
0651: INJECTED 400 ML FREON 12
0655: DIVIDE BAG
0659: INJECTED 370 MICROLITERS JP-4 (PET) INTO SIDE A
0740: INJECTED 370 MICROLITERS UNLEADED GASOLINE INTO SIDE B
0900: BAG UNCOVERED (T=0)
1600: BAG COVERED FOR THE NIGHT

DAY 2 (FEB 6)

0900: UNCOVERED BAG; SOME FOG AND LOW CLOUDS
1330: HIGH CLOUDS ARE OBSCURING SUNLIGHT; SLIGHT WIND HAS COME UP
1520: RUN OVER

RESULTS	DAY 1	DAY 2
-----	-----	-----
AVG.T(DEG.C)	18(+7)	18(+5)
AVG.UV(MW/CM2)	1.8(+0.6)	1.5(+0.6)

NOTES:

-VAR 3700 DATA HIGHLY SCATTERED DUE TO INSTRUMENT MALFUNCTION
-BYRON DATA CONSIDERED TO BE UNRELIABLE AND IS NOT USED

T=0 AT 900 PST

BAG NO. 20 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	17.3	6.4	DEG C SIDE 1
T	DORIC-1	17.8	6.1	DEG C SIDE 2
UV RAD	EPPLEY-2	1.62	0.59	MW/CM2 SIDE 1

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.344	PPM SIDE 1
NO	B-NOX-1	0.333	PPM SIDE 2
NO2-UNC	B-NOX-1	0.131	PPM SIDE 1
NO2-UNC	B-NOX-1	0.132	PPM SIDE 2
THC	BK6800-1	24.10	PPMC SIDE 1
THC	BK6800-1	29.30	PPMC SIDE 2

AFF- 62
JP-4 (PET) VS UNLEADED GASOLINE
1981, FEB 5,6

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
880	EG&G	EG&G DEW POINT HYGROMETER
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4250	BYRON	BYRON 401 HYDROCARBON ANALYZER
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART, CTR:SN:76-148
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR:SN143
2100	PN-1	RM-121 POROPAK-N GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-400 GC; FID
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARIZ CAP. GC; FID
3000	CA	CHROMOIROPIC ACID HCHO ANALYSIS
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG
2000	ECD-1	RM-121; 12" 5% CARBOWAX-400 GC; ECD

AFF- 52
JP-4 (PET) VS UNLEADED GASOLINE
1981, FEB 5,6

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 OZONE PPM D-1790	SIDE 2 OZONE PPM D-1790	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE NOX-UN PPM B-NOX-
1 615	-165	-0.002	-0.002	0.010	0.010	0.003	0.003	0.01
1 725	-95	0.000	-----	0.344	-----	0.131	-----	0.45
1 835	-25	-----	0.002	-----	0.333	-----	0.132	-----
1 905	5	0.005	-----	0.341	-----	0.137	-----	0.45
1 915	15	-----	0.010	-----	0.168	-----	0.268	-----
1 1005	65	0.009	-----	0.279	-----	0.176	-----	0.47
1 1015	75	-----	0.403	-----	0.019	-----	0.246	-----
1 1105	125	0.010	-----	0.199	-----	0.241	-----	0.46
1 1115	135	-----	0.475	-----	0.023	-----	0.213	-----
1 1205	185	0.031	-----	0.111	-----	0.318	-----	0.44
1 1215	195	-----	0.460	-----	0.022	-----	0.227	-----
1 1305	245	0.066	-----	0.051	-----	0.362	-----	0.41
1 1315	255	-----	0.449	-----	0.031	-----	0.228	-----
1 1405	305	0.119	-----	0.039	-----	0.371	-----	0.40
1 1415	315	-----	0.440	-----	0.033	-----	0.231	-----
1 1505	365	0.150	-----	0.033	-----	0.362	-----	0.39
1 1515	375	-----	0.427	-----	0.037	-----	0.229	-----
1 1605	425	0.148	-----	0.033	-----	0.327	-----	0.38
1 1615	435	-----	0.413	-----	0.033	-----	0.229	-----
2 835	1415	0.008	-----	0.032	-----	0.145	-----	0.17
2 845	1425	-----	0.333	-----	0.038	-----	0.199	-----
2 905	1445	0.022	-----	0.041	-----	0.140	-----	0.17
2 915	1455	-----	0.319	-----	0.037	-----	0.198	-----
2 1005	1505	0.084	-----	0.031	-----	0.132	-----	0.18
2 1015	1515	-----	0.309	-----	0.031	-----	0.197	-----
2 1105	1565	0.146	-----	0.023	-----	0.122	-----	0.14
2 1115	1575	-----	0.298	-----	0.030	-----	0.192	-----
2 1205	1625	0.230	-----	0.022	-----	0.111	-----	0.17
2 1215	1635	-----	0.306	-----	0.029	-----	0.195	-----
2 1305	1685	0.282	-----	0.021	-----	0.109	-----	0.17
2 1315	1695	-----	0.309	-----	0.022	-----	0.199	-----
2 1405	1745	0.293	-----	0.024	-----	0.103	-----	0.17
2 1415	1755	-----	0.306	-----	0.030	-----	0.197	-----
2 1505	1805	0.297	-----	0.023	-----	0.102	-----	0.17
2 1515	1815	-----	0.299	-----	0.030	-----	0.192	-----

----- NO DATA TAKEN

	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1
0	0.003	0.003	0.014	0.014	1.64	1.64
1	0.131	-----	0.492	-----	24.10	-----
3	-----	0.132	-----	0.482	-----	29.30
8	0.137	-----	0.493	-----	23.90	-----
9	-----	0.268	-----	0.463	-----	29.70
2	0.176	-----	0.478	-----	23.90	-----
3	-----	0.246	-----	0.257	-----	26.70
9	0.241	-----	0.462	-----	23.80	-----
2	-----	0.213	-----	0.227	-----	25.70
3	0.318	-----	0.441	-----	23.70	-----
2	-----	0.227	-----	0.242	-----	25.20
2	0.362	-----	0.419	-----	23.20	-----
3	-----	0.228	-----	0.251	-----	24.90
3	0.371	-----	0.408	-----	22.90	-----
3	-----	0.231	-----	0.259	-----	24.70
3	0.362	-----	0.392	-----	22.50	-----
7	-----	0.229	-----	0.259	-----	24.60
3	0.329	-----	0.350	-----	22.40	-----
3	-----	0.229	-----	0.257	-----	24.40
3	0.145	-----	0.172	-----	22.50	-----
8	-----	0.199	-----	0.232	-----	24.70
3	0.140	-----	0.178	-----	22.50	-----
7	-----	0.198	-----	0.230	-----	24.60
3	0.132	-----	0.158	-----	21.90	-----
3	-----	0.197	-----	0.220	-----	24.40
3	0.122	-----	0.141	-----	21.60	-----
3	-----	0.192	-----	0.218	-----	24.30
3	0.111	-----	0.129	-----	21.40	-----
9	-----	0.195	-----	0.218	-----	23.90
2	0.109	-----	0.121	-----	21.40	-----
2	-----	0.199	-----	0.219	-----	23.90
2	0.103	-----	0.121	-----	21.10	-----
3	-----	0.197	-----	0.219	-----	23.80
3	0.102	-----	0.121	-----	20.90	-----
3	-----	0.192	-----	0.217	-----	23.60

AFF- 62
JP-4 (PET) VS UNLEADED GASOLINE
1981, FEB 5,6

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	SIDE 1 DEW PT DEG C EG&G	SIDE 1 UV RAD MW/CM2 EPPLEY-2	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE #PART> PART/C CLIME
1 615	-165	4.8	4.8	-4.0	-----	0.0	0.0	0.
1 725	-95	5.5	-----	-----	-----	0.0	-----	0.
1 835	-25	-----	8.5	-----	-----	-----	1.0	-----
1 905	5	11.9	-----	-----	1.35	1.2	-----	0.
1 915	15	-----	12.8	-----	1.52	-----	110.0	-----
1 1005	65	16.3	-----	-----	1.63	50.0	-----	0.
1 1015	75	-----	17.4	-----	1.41	-----	72.0	-----
1 1105	125	18.8	-----	-----	2.17	31.0	-----	0.
1 1115	135	-----	19.3	-----	2.43	-----	52.0	-----
1 1205	185	23.4	-----	-----	2.51	20.0	-----	0.
1 1215	195	-----	23.7	-----	2.63	-----	37.0	-----
1 1305	245	24.2	-----	-----	2.20	14.0	-----	0.
1 1315	255	-----	24.6	-----	1.98	-----	26.0	-----
1 1405	305	24.8	-----	-----	1.57	9.5	-----	0.
1 1415	315	-----	24.7	-----	1.52	-----	18.0	-----
1 1505	365	23.0	-----	-----	0.65	7.8	-----	0.
1 1515	375	-----	22.8	-----	1.00	-----	13.2	-----
1 1605	425	19.8	-----	-----	-----	5.0	-----	1.
1 1615	435	-----	19.6	-----	-----	-----	9.8	-----
2 835	1415	9.8	-----	-----	-----	0.0	-----	92.
2 845	1425	-----	9.9	-----	-----	-----	0.0	-----
2 905	1445	9.9	-----	-----	0.80	0.0	-----	97.
2 915	1455	-----	10.1	-----	0.99	-----	0.0	-----
2 1005	1505	16.0	-----	-----	1.40	0.1	-----	21.
2 1015	1515	-----	17.0	-----	1.35	-----	0.1	-----
2 1105	1565	18.0	-----	-----	1.51	0.1	-----	149.
2 1115	1575	-----	18.6	-----	1.89	-----	0.1	-----
2 1205	1625	21.0	-----	-----	2.34	0.1	-----	138.
2 1215	1635	-----	22.0	-----	2.52	-----	0.1	-----
2 1305	1685	23.8	-----	-----	2.15	0.0	-----	159.
2 1315	1695	-----	24.0	-----	1.87	-----	0.1	-----
2 1405	1745	20.6	-----	-----	1.17	0.2	-----	156.
2 1415	1755	-----	20.2	-----	1.13	-----	0.1	-----
2 1505	1805	20.3	-----	-----	0.75	0.1	-----	138.
2 1515	1815	-----	20.0	-----	0.85	-----	0.1	-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 4

SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET
0.0	0.0	0.	0.	0.	0.
0.0	-----	0.	-----	0.	-----
-----	1.0	-----	0.	-----	0.
1.2	-----	0.	-----	0.	-----
-----	110.0	-----	0.	-----	0.
50.0	-----	0.	-----	0.	-----
-----	72.0	-----	1.	-----	0.
31.0	-----	0.	-----	0.	-----
-----	52.0	-----	45.	-----	0.
20.0	-----	0.	-----	0.	-----
-----	37.0	-----	87.	-----	0.
14.0	-----	0.	-----	0.	-----
-----	26.0	-----	119.	-----	1.
9.5	-----	0.	-----	0.	-----
-----	18.0	-----	137.	-----	2.
7.8	-----	0.	-----	0.	-----
-----	13.2	-----	150.	-----	3.
5.0	-----	1.	-----	0.	-----
-----	9.8	-----	143.	-----	3.
0.0	-----	92.	-----	3.	-----
-----	0.0	-----	32.	-----	0.
0.0	-----	97.	-----	3.	-----
-----	0.0	-----	42.	-----	0.
0.1	-----	21.	-----	14.	-----
-----	0.1	-----	69.	-----	1.
0.1	-----	149.	-----	21.	-----
-----	0.1	-----	91.	-----	3.
0.1	-----	138.	-----	55.	-----
-----	0.1	-----	117.	-----	5.
0.0	-----	159.	-----	79.	-----
-----	0.1	-----	139.	-----	10.
0.2	-----	156.	-----	74.	-----
-----	0.1	-----	133.	-----	8.
0.1	-----	138.	-----	59.	-----
-----	0.1	-----	116.	-----	7.

2

AFF- 62
JP-4 (PET) VS UNLEADED GASOLINE
1981, FEB 5,6

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UM3/CC TSI-023	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE AER. UM2/ TSI-0
1 612	-168	-----	-----	-----	-----	-----	-----	-----
1 615	-165	0.	0.	1.	1.	315.	315.	7
1 720	-100	-----	-----	-----	-----	-----	-----	-----
1 725	-95	0.	-----	-1.	-----	165.	-----	-6
1 830	-30	-----	-----	-----	-----	-----	-----	-----
1 835	-25	-----	0.	-----	1.	-----	733.	-----
1 905	5	0.	-----	1.	-----	430.	-----	9
1 915	15	-----	0.	-----	3.	-----	1.1E 05	-----
1 1005	65	0.	-----	2.	-----	8.8E 04	-----	254
1 1015	75	-----	0.	-----	168.	-----	1.4E 05	-----
1 1105	125	0.	-----	9.	-----	5.9E 04	-----	540
1 1114	134	-----	-----	-----	-----	-----	-----	-----
1 1115	135	-----	0.	-----	207.	-----	1.0E 05	-----
1 1205	185	0.	-----	18.	-----	3.8E 04	-----	819
1 1215	195	-----	0.	-----	168.	-----	7.3E 04	-----
1 1305	245	0.	-----	20.	-----	3.5E 04	-----	907
1 1315	255	-----	0.	-----	142.	-----	5.3E 04	-----
1 1330	270	-----	-----	-----	-----	-----	-----	-----
1 1405	305	0.	-----	34.	-----	2.6E 04	-----	1105
1 1415	315	-----	0.	-----	111.	-----	4.1E 04	-----
1 1505	365	0.	-----	34.	-----	1.7E 04	-----	1036
1 1515	375	-----	0.	-----	91.	-----	3.2E 04	-----
1 1547	407	-----	-----	-----	-----	-----	-----	-----
1 1605	425	0.	-----	32.	-----	1.2E 04	-----	877
1 1607	427	-----	-----	-----	-----	-----	-----	-----
1 1615	435	-----	0.	-----	78.	-----	2.6E 04	-----
1 1644	464	-----	-----	-----	-----	-----	-----	-----
2 740	1360	-----	-----	-----	-----	-----	-----	-----
2 829	1409	-----	-----	-----	-----	-----	-----	-----
2 835	1415	0.	-----	3.	-----	146.	-----	55
2 845	1425	-----	0.	-----	5.	-----	1307.	-----
2 858	1438	-----	-----	-----	-----	-----	-----	-----
2 905	1445	0.	-----	5.	-----	529.	-----	63
2 915	1455	-----	0.	-----	7.	-----	823.	-----
2 1005	1505	0.	-----	5.	-----	351.	-----	60
2 1015	1515	-----	0.	-----	8.	-----	601.	-----
2 1105	1565	0.	-----	3.	-----	699.	-----	50
2 1114	1574	-----	-----	-----	-----	-----	-----	-----
2 1115	1575	-----	0.	-----	5.	-----	1760.	-----
2 1205	1625	0.	-----	6.	-----	944.	-----	88
2 1215	1635	-----	0.	-----	8.	-----	-29.	-----
2 1305	1685	1.	-----	6.	-----	1037.	-----	106
2 1315	1695	-----	0.	-----	4.	-----	529.	-----
2 1333	1713	-----	-----	-----	-----	-----	-----	-----
2 1405	1745	1.	-----	7.	-----	728.	-----	107
2 1415	1755	-----	0.	-----	3.	-----	701.	-----
2 1505	1805	1.	-----	6.	-----	661.	-----	85
2 1514	1814	-----	-----	-----	-----	-----	-----	-----
2 1515	1815	-----	0.	-----	4.	-----	346.	-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 5

DE 2 R.V 3/CC -023	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 1 N-C4 PPM DMS-1	SIDE 2 N-C4 PPM DMS-1	SIDE 2 C1BENZ PPM VAR 3700
1.	315.	315.	7.	7.	0.0008	0.0008	
	165.		-6.		0.0085		
1.	430.	733.	9.	6.		0.0597	
3.	8.8E 04	1.1E 05	254.	282.			
168.	5.9E 04	1.4E 05	540.	6026.			
							0.6339
207.	3.8E 04	1.0E 05	819.	6019.			
168.	3.5E 04	7.3E 04	907.	4718.			
142.		5.3E 04		3749.			0.6046
	2.6E 04		1105.				
111.	1.7E 04	4.1E 04	1036.	2878.			
91.		3.2E 04		2264.			0.6307
	1.2E 04		877.		0.0081		
78.		2.6E 04		1770.		0.0520	
					0.0087		
	146.		55.			0.0575	
5.		1307.		92.			0.6162
	529.		63.				
7.	351.	823.	60.	104.			
8.	699.	601.	50.	106.			
							0.6368
5.		1760.		77.			
	944.		88.				
8.		-29.		90.			
	1037.		106.				
4.		529.		61.			0.6150
	728.		107.		0.0082		
3.		701.		43.			
	661.		85.			0.0533	
4.		346.		41.			

2

AFF- 62
JP-4 (PET) VS UNLEADED GASOLINE
1981, FEB 5,6

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 I-C5 PPM DMS-1	SIDE 2 I-C5 PPM DMS-1	SIDE 1 N-C5 PPM DMS-1	SIDE 2 N-C5 PPM DMS-1	SIDE 1 N-C6 PPM DMS-1	SIDE 1 N-C6 PPM VAR 3700	SID N- PP DMS
1 612	-168	0.0002	0.0002	0.0001	0.0001	-----	-----	---
1 715	-105	-----	-----	-----	-----	-----	0.2681	---
1 720	-100	0.0467	-----	0.0419	-----	0.0883	-----	---
1 830	-30	-----	0.3707	-----	0.0882	-----	-----	0.0
1 1003	63	-----	-----	-----	-----	-----	0.2540	---
1 1114	134	-----	-----	-----	-----	-----	-----	---
1 1223	203	-----	-----	-----	-----	-----	0.2494	---
1 1330	270	-----	-----	-----	-----	-----	-----	---
1 1438	338	-----	-----	-----	-----	-----	0.2464	---
1 1547	407	-----	-----	-----	-----	-----	-----	---
1 1607	427	0.0451	-----	0.0489	-----	0.0834	-----	---
1 1644	464	-----	0.3097	-----	0.0746	-----	-----	0.0
2 740	1360	0.0427	-----	0.0462	-----	0.0782	-----	---
2 756	1376	-----	-----	-----	-----	-----	0.2462	---
2 829	1409	-----	0.3529	-----	0.0839	-----	-----	0.0
2 858	1438	-----	-----	-----	-----	-----	-----	---
2 1004	1504	-----	-----	-----	-----	-----	0.2633	---
2 1114	1574	-----	-----	-----	-----	-----	-----	---
2 1225	1645	-----	-----	-----	-----	-----	0.2481	---
2 1333	1713	-----	-----	-----	-----	-----	-----	---
2 1405	1745	0.0433	-----	-----	-----	0.0836	-----	---
2 1440	1780	-----	-----	-----	-----	-----	0.2477	---
2 1514	1814	-----	1.450	-----	0.0796	-----	-----	0.0

----- NO DATA TAKEN

12 NOV 1981
PAGE 6

	SIDE 1 N-C6 PPM DMS-1	SIDE 1 N-C6 PPM VAR 3700	SIDE 2 N-C6 PPM DMS-1	SIDE 2 N-C6 PPM VAR 3700	SIDE 1 N-C7 PPM VAR 3700	SIDE 2 N-C7 PPM VAR 3700	SIDE 1 MECYC-C6 PPM VAR 3700
2	-----	-----	-----	-----	-----	-----	-----
5	0.0883	0.2681	-----	-----	0.3009	-----	0.2727
1	-----	-----	0.0816	-----	-----	-----	-----
001	-----	0.2540	-----	0.3355	0.2812	0.1783	0.2441
882	-----	0.2494	-----	0.3247	0.2715	-----	0.2197
-----	-----	0.2464	-----	0.2627	0.2668	0.1606	0.2256
-----	0.0834	-----	-----	-----	-----	-----	-----
746	-----	-----	0.0622	-----	-----	-----	-----
-----	0.0782	-----	-----	-----	-----	-----	-----
-----	-----	0.2462	-----	-----	0.2626	-----	0.2264
839	-----	-----	0.0812	0.2684	-----	0.1768	-----
-----	-----	0.2633	-----	0.2614	0.2738	-----	0.2227
-----	-----	0.2481	-----	0.2404	0.2704	0.1770	0.2255
-----	0.0836	-----	-----	-----	-----	0.1878	-----
-----	-----	0.2477	-----	-----	0.2682	-----	0.2278
796	-----	-----	0.0712	-----	-----	-----	-----

AFF- 62
JP-4 (PET) VS UNLEADED GASOLINE
1901, FEB 5, 6

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 N-C8 PPH VAR 3700	SIDE 2 N-C8 PPH VAR 3700	SIDE 1 N-C9 PPH VAR 3700	SIDE 1 N-C10 PPH VAR 3700	SIDE 1 N-C11 PPH VAR 3700	SIDE 1 N-C12 PPH VAR 3700	SIDE N-C1 PPH VAR 3
1 612	-168	-----	-----	-----	-----	-----	-----	-----
1 715	-105	0.3300	-----	0.1956	0.1424	0.1239	0.1568	0.13
1 720	-100	-----	-----	-----	-----	-----	-----	-----
1 830	-30	-----	-----	-----	-----	-----	-----	-----
1 1003	63	0.3127	-----	0.1671	0.1341	0.1197	0.1566	0.10
1 1114	134	-----	0.0211	-----	-----	-----	-----	-----
1 1223	203	0.2822	-----	0.1483	0.1138	0.1085	0.1386	0.01
1 1330	270	-----	0.0185	-----	-----	-----	-----	-----
1 1438	338	0.2942	-----	0.1656	0.1187	0.1143	0.1286	0.01
1 1547	407	-----	0.0180	-----	-----	-----	-----	-----
1 1607	427	-----	-----	-----	-----	-----	-----	-----
1 1644	464	-----	-----	-----	-----	-----	-----	-----
2 740	1360	-----	-----	-----	-----	-----	-----	-----
2 756	1376	0.2888	-----	0.1642	0.0176	0.1306	-----	-----
2 829	1409	-----	-----	-----	-----	-----	-----	-----
2 858	1438	-----	0.0202	-----	-----	-----	-----	-----
2 1004	1504	0.1606	-----	0.1629	0.0173	0.1043	0.1240	-----
2 1114	1574	-----	0.0245	-----	-----	-----	-----	-----
2 1225	1645	0.2998	-----	0.1716	0.0169	0.1211	0.1272	-----
2 1333	1713	-----	0.0188	-----	-----	-----	-----	-----
2 1405	1745	-----	-----	-----	-----	-----	-----	-----
2 1440	1780	0.2941	-----	0.1518	0.0143	0.1067	-----	-----
2 1514	1814	-----	-----	-----	-----	-----	-----	-----

----- NO DATA TAKEN

DE 1 C10 PPM 3700	SIDE 1 N-C11 PPM VAR 3700	SIDE 1 N-C12 PPM VAR 3700	SIDE 1 N-C13 PPM VAR 3700	SIDE 1 BENZENE PPM 10'C-600	SIDE 2 BENZENE PPM 10'C-600	SIDE 1 TOLUENE PPM 10'C-600	SIDE 2 TOLUENE PPM 10'C-600
-----	-----	-----	-----	0.0001	0.0001	0.0001	0.0001
1424	0.1239	0.1568	0.1348	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	0.0280	-----
-----	-----	-----	-----	-----	0.0670	-----	-----
1341	0.1197	0.1566	0.1032	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----	-----
1138	0.1085	0.1386	0.0117	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----	-----
1187	0.1143	0.1286	0.0106	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	0.0254	-----
-----	-----	-----	-----	-----	0.0538	-----	0.3450
-----	-----	-----	-----	-----	-----	0.0254	-----
0176	0.1306	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	0.0528	-----	0.3826
-----	-----	-----	-----	-----	-----	-----	-----
0173	0.1043	0.1240	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----	-----
0169	0.1211	0.1272	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	0.0285	-----
0143	0.1067	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	0.1197	-----	0.3638

AFF- 62
JP-4 (PET) VS UNLEADED GASOLINE
1981, FEB 5,6

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 O-XYL PPM 10'C-600	SIDE 2 O-XYL PPM VAR 3700	SIDE 2 O-XYL PPM 10'C-600	SIDE 1 M-XYL PPM VAR 3700	SIDE 2 C2BENZ PPM VAR 3700	SIDE 1 124TMEBZ PPM VAR 3700	SIDE 124TM PPM VAR 3
1 612	-168	-----	-----	-----	-----	-----	-----	-----
1 715	-105	-----	-----	-----	0.0954	-----	0.0370	-----
1 720	-100	-----	-----	-----	-----	-----	-----	-----
1 830	-30	-----	-----	0.1029	-----	-----	-----	-----
1 1003	63	-----	-----	-----	0.0805	-----	0.0327	-----
1 1114	134	-----	0.3078	-----	-----	0.2429	-----	0.21
1 1223	203	-----	-----	-----	0.0709	-----	0.0250	-----
1 1330	270	-----	0.2816	-----	-----	0.2638	-----	0.19
1 1438	338	-----	-----	-----	0.0710	-----	0.0243	-----
1 1547	407	-----	0.2921	-----	-----	0.2327	-----	0.18
1 1607	427	0.0040	-----	-----	-----	-----	-----	-----
1 1644	464	-----	-----	0.0777	-----	-----	-----	-----
2 740	1360	0.0049	-----	-----	-----	-----	-----	-----
2 756	1376	-----	-----	-----	0.0714	-----	0.0239	-----
2 829	1409	-----	-----	0.0852	-----	-----	-----	-----
2 858	1438	-----	0.2950	-----	-----	0.2491	-----	0.20
2 1004	1504	-----	-----	-----	0.0758	-----	0.0235	-----
2 1114	1574	-----	0.2792	-----	-----	0.2501	-----	0.19
2 1225	1645	-----	-----	-----	0.0782	-----	0.0229	-----
2 1333	1713	-----	0.2853	-----	-----	0.2228	-----	0.17
2 1405	1745	0.0044	-----	-----	-----	-----	-----	-----
2 1440	1780	-----	-----	-----	0.0679	-----	0.0193	-----
2 1514	1814	-----	-----	0.0792	-----	-----	-----	-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 8

SIDE 2 C2BENZ PPM VAR 3700	SIDE 1 124TMEBZ PPM VAR 3700	SIDE 2 124TMEBZ PPM VAR 3700	SIDE 1 M+P-XYL PPM 10'C-600	SIDE 2 M+P-XYL PPM 10'C-600	SIDE 1 FREON 12 RAW DATA DMS-1	SIDE 2 FREON 12 RAW DATA DMS-1
-----	-----	-----	-----	-----	-----	-----
-----	0.0370	-----	-----	-----	-----	-----
-----	-----	-----	0.0295	-----	438.8	-----
-----	-----	-----	-----	0.3241	-----	458.8
0.2429	0.0327	-----	-----	-----	-----	-----
-----	0.0250	0.2133	-----	-----	-----	-----
0.2638	-----	0.1981	-----	-----	-----	-----
-----	0.0243	-----	-----	-----	-----	-----
0.2327	-----	0.1893	-----	-----	-----	-----
-----	-----	-----	0.0253	-----	431.1	-----
-----	-----	-----	-----	0.2062	-----	403.5
-----	-----	-----	0.0245	-----	387.6	-----
-----	0.0239	-----	-----	-----	-----	-----
-----	-----	-----	-----	0.2099	-----	456.2
0.2491	-----	0.2025	-----	-----	-----	-----
-----	0.0235	-----	-----	-----	-----	-----
0.2501	-----	0.1915	-----	-----	-----	-----
-----	0.0229	-----	-----	-----	-----	-----
0.2228	-----	0.1763	-----	-----	-----	-----
-----	-----	-----	0.0209	-----	419.8	-----
-----	0.0193	-----	-----	-----	-----	-----
-----	-----	-----	-----	0.1836	-----	431.6

2

AFF- 62
JP-4 (PET) VS UNLEADED GASOLINE
1981, FEB 5, 6

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 CO PPM BYRON	SIDE 1 CO PPM BK6800-1	SIDE 2 CO PPM BYRON	SIDE 2 CO PPM BK6800-1	SIDE 1 PAN PPM ECD-1	SIDE 2 PAN PPM ECD-1	SIDE HCN PPM CA
1 612	-168	-----	-----	-----	-----	0.000	0.000	-----
1 615	-165	-----	1.06	-----	1.06	-----	-----	-----
1 720	-100	-----	-----	-----	-----	0.000	-----	-----
1 725	-95	-----	1.12	-----	-----	-----	-----	-----
1 830	-30	-----	-----	-----	-----	-----	0.000	-----
1 835	-25	-----	-----	-----	1.08	-----	-----	-----
1 840	-20	-----	-----	-----	-----	-----	-----	0.00
1 905	5	-----	1.15	-----	-----	-----	-----	-----
1 915	15	-----	-----	-----	1.07	-----	-----	-----
1 1005	65	-----	1.15	-----	-----	0.000	-----	-----
1 1015	75	-----	-----	-----	1.22	-----	-----	-----
1 1017	77	-----	-----	-----	-----	-----	0.052	-----
1 1103	123	-----	-----	-----	-----	0.001	-----	-----
1 1105	125	-----	1.32	-----	-----	-----	-----	-----
1 1115	135	-----	-----	-----	1.32	-----	0.073	-----
1 1200	180	-----	-----	-----	-----	-----	-----	0.00
1 1204	184	-----	-----	-----	-----	0.003	-----	-----
1 1205	185	-----	1.19	-----	-----	-----	-----	-----
1 1214	194	-----	-----	-----	-----	-----	0.101	-----
1 1215	195	-----	-----	-----	1.48	-----	-----	-----
1 1304	244	-----	-----	-----	-----	0.006	-----	-----
1 1305	245	-----	1.20	-----	-----	-----	-----	-----
1 1315	255	-----	-----	-----	1.59	-----	0.101	-----
1 1404	304	-----	-----	-----	-----	0.008	-----	-----
1 1405	305	0.37	1.38	-----	-----	-----	-----	-----
1 1414	314	-----	-----	-----	-----	-----	0.195	-----
1 1415	315	-----	-----	0.92	1.66	-----	-----	-----
1 1504	364	-----	-----	-----	-----	0.011	-----	-----
1 1505	365	0.40	1.25	-----	-----	-----	-----	-----
1 1515	375	-----	-----	-----	1.84	-----	0.100	-----
1 1600	420	-----	-----	-----	-----	-----	-----	0.00
1 1605	425	-----	1.26	-----	-----	-----	-----	-----
1 1607	427	-----	-----	-----	-----	0.014	-----	-----
1 1615	435	-----	-----	-----	1.90	-----	-----	-----
1 1644	464	-----	-----	-----	-----	-----	0.093	-----
2 740	1360	-----	-----	-----	-----	0.014	-----	-----
2 829	1409	-----	-----	-----	-----	-----	0.072	-----
2 835	1415	-----	1.39	-----	-----	-----	-----	0.00
2 845	1425	-----	-----	-----	2.02	-----	-----	-----
2 905	1445	0.21	1.27	-----	-----	-----	-----	-----
2 915	1455	-----	-----	0.02	1.83	-----	-----	-----
2 1005	1505	-----	1.26	-----	-----	0.020	-----	-----
2 1015	1515	-----	-----	-----	1.93	-----	-----	-----
2 1018	1518	-----	-----	-----	-----	-----	0.086	-----
2 1105	1565	0.22	1.29	-----	-----	-----	-----	-----
2 1106	1566	-----	-----	-----	-----	0.024	-----	-----
2 1115	1573	-----	-----	0.61	2.15	-----	-----	-----
2 1117	1577	-----	-----	-----	-----	-----	0.079	-----
2 1200	1620	-----	-----	-----	-----	-----	-----	0.00
2 1204	1624	-----	-----	-----	-----	0.025	-----	-----
2 1205	1625	0.71	1.31	-----	-----	-----	-----	-----

12 NOV 1981
PAGE 9

SIDE 1 PAN PPM ECD-1	SIDE 2 PAN PPM ECD-1	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023
0.000	0.000	-----	-----	-----	-----
-----	-----	-----	-----	334.	334.
0.000	-----	-----	-----	-----	-----
-----	-----	-----	-----	334.	-----
-----	0.000	-----	-----	-----	-----
-----	-----	-----	-----	-----	668.
-----	-----	0.001	0.021	-----	-----
-----	-----	-----	-----	501.	-----
-----	-----	-----	-----	-----	1.0E 05
0.000	-----	-----	-----	7.4E 04	-----
-----	-----	-----	-----	-----	-5678.
-----	0.052	-----	-----	-----	-----
0.001	-----	-----	-----	-----	-----
-----	-----	-----	-----	2.2E 04	-----
-----	0.073	-----	-----	-----	2505.
-----	-----	0.018	0.088	-----	-----
0.003	-----	-----	-----	-----	-----
-----	-----	-----	-----	2338.	-----
-----	0.101	-----	-----	-----	-----
-----	-----	-----	-----	-----	1670.
0.006	-----	-----	-----	-----	-----
-----	-----	-----	-----	1336.	-----
-----	0.101	-----	-----	-----	1837.
0.008	-----	-----	-----	-----	-----
-----	-----	-----	-----	2004.	-----
-----	0.195	-----	-----	-----	-----
-----	-----	-----	-----	-----	5344.
0.011	-----	-----	-----	-----	-----
-----	-----	-----	-----	501.	-----
-----	0.100	-----	-----	-----	4676.
-----	-----	0.024	0.118	-----	-----
-----	-----	-----	-----	2338.	-----
0.014	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	9352.
-----	0.093	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
0.014	-----	-----	-----	-----	-----
-----	0.072	-----	-----	-----	-----
-----	-----	0.042	0.156	-167.	-----
-----	-----	-----	-----	-----	668.
-----	-----	-----	-----	334.	-----
-----	-----	-----	-----	-----	334.
0.020	-----	-----	-----	0.	-----
-----	-----	-----	-----	-----	167.
-----	0.086	-----	-----	-----	-----
-----	-----	-----	-----	334.	-----
0.024	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	1503.
-----	0.079	-----	-----	-----	-----
-----	-----	0.040	0.137	-----	-----
0.025	-----	-----	-----	-----	-----
-----	-----	-----	-----	334.	-----

AFF- 62
 JP-4 (PET) VS UNLEADED GASOLINE
 1981, FEB 5, 6

CLOCK	ELAPSED	SIDE 1	SIDE 1	SIDE 2	SIDE 2	SIDE 1	SIDE 2	SIDE
TIME	TIME	CO	CO	CO	CO	PAN	PAN	HCH
BY HR.	(MIN)	PPM	PPM	PPM	PPM	PPM	PPM	PPM
		BYRON	BK6800-1	BYRON	BK6800-1	ECD-1	ECD-1	CA
2 1214	1634	-----	-----	-----	-----	-----	0.068	-----
2 1215	1635	-----	-----	-----	2.05	-----	-----	-----
2 1303	1683	-----	-----	-----	-----	0.030	-----	-----
2 1305	1685	0.25	1.39	-----	-----	-----	-----	-----
2 1315	1695	-----	-----	0.85	2.06	-----	-----	-----
2 1316	1696	-----	-----	-----	-----	-----	0.071	-----
2 1405	1745	0.25	1.42	-----	-----	0.030	-----	-----
2 1415	1755	-----	-----	0.98	2.14	-----	-----	-----
2 1500	1800	-----	-----	-----	-----	-----	-----	0.0
2 1505	1805	0.23	1.42	-----	-----	-----	-----	-----
2 1514	1814	-----	-----	-----	-----	-----	0.070	-----
2 1515	1815	-----	-----	0.90	2.19	-----	-----	-----

----- NO DATA TAKEN

12 NOV 1981
PAGE 10

	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
	PAN	PAN	HCHO	HCHO	PART.024	PART.024
	PPM	PPM	PPM	PPM	PART/CC	PART/CC
2	ECD-1	ECD-1	CA	CA	TSI-023	TSI-023
-1	-----	0.068	-----	-----	-----	-----
	-----	-----	-----	-----	-----	-334.
	0.030	-----	-----	-----	-----	-----
	-----	-----	-----	-----	167.	-----
	-----	-----	-----	-----	-----	334.
	-----	0.071	-----	-----	-----	-----
	0.030	-----	-----	-----	0.	-----
	-----	-----	-----	-----	-----	501.
	-----	-----	0.042	0.134	-----	-----
	-----	-----	-----	-----	167.	-----
	-----	0.070	-----	-----	-----	-----
	-----	-----	-----	-----	-----	167.

AFF- 62
JP-4 (PET) VS UNLEADED GASOLINE
1981, FEB 5,6

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.042 PART/CC TSI-023	SIDE 2 PART.042 PART/CC TSI-023	SIDE 1 PART.075 PART/CC TSI-023	SIDE 2 PART.075 PART/CC TSI-023	SIDE 1 PART.133 PART/CC TSI-023	SIDE 2 PART.133 PART/CC TSI-023	SI PAR TSI
1 615	-165	-87.	-87.	89.	89.	-24.	-24.	
1 725	-95	-174.	-----	44.	-----	-48.	-----	
1 835	-25	-----	0.	-----	44.	-----	24.	--
1 905	5	-87.	-----	0.	-----	0.	-----	
1 915	15	-----	7656.	-----	2708.	-----	24.	--
1 1005	65	1.1E 04	-----	2975.	-----	48.	-----	
1 1015	75	-----	6264.	-----	7.4E 04	-----	5.7E 04	--
1 1105	125	1.9E 04	-----	1.5E 04	-----	1615.	-----	1
1 1115	135	-----	1.2E 04	-----	2.3E 04	-----	5.5E 04	--
1 1205	185	7569.	-----	2.2E 04	-----	5037.	-----	2
1 1215	195	-----	6699.	-----	1.4E 04	-----	4.1E 04	--
1 1305	245	2871.	-----	2.5E 04	-----	5037.	-----	7
1 1315	255	-----	4698.	-----	6926.	-----	3.1E 04	--
1 1405	305	6090.	-----	4884.	-----	1.2E 04	-----	14
1 1415	315	-----	435.	-----	6704.	-----	2.2E 04	--
1 1505	365	870.	-----	2842.	-----	1.1E 04	-----	16
1 1515	375	-----	2349.	-----	3330.	-----	1.6E 04	--
1 1605	425	-696.	-----	1288.	-----	7616.	-----	17
1 1615	435	-----	696.	-----	133.	-----	1.1E 04	--
2 835	1415	0.	-----	89.	-----	48.	-----	1
2 845	1425	-----	0.	-----	178.	-----	169.	--
2 905	1445	0.	-----	-44.	-----	72.	-----	1
2 915	1455	-----	-87.	-----	89.	-----	193.	--
2 1005	1505	87.	-----	89.	-----	48.	-----	
2 1015	1515	-----	87.	-----	0.	-----	96.	--
2 1105	1565	0.	-----	133.	-----	96.	-----	
2 1115	1575	-----	-174.	-----	133.	-----	72.	--
2 1205	1625	87.	-----	89.	-----	217.	-----	1
2 1215	1635	-----	87.	-----	44.	-----	48.	--
2 1305	1685	87.	-----	133.	-----	337.	-----	2
2 1315	1695	-----	0.	-----	0.	-----	48.	--
2 1405	1745	174.	-----	44.	-----	241.	-----	1
2 1415	1755	-----	0.	-----	89.	-----	-24.	--
2 1505	1805	87.	-----	44.	-----	120.	-----	1
2 1515	1815	-----	87.	-----	0.	-----	0.	--

----- NO DATA TAKEN

2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
075	PART.133	PART.133	PART.237	PART.237	PART.422	PART.422
/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
9.	-24.	-24.	0.	0.	0.	0.
---	-49.	-----	12.	-----	0.	-----
4.	-----	24.	-----	0.	-----	-7.
---	0.	-----	12.	-----	0.	-----
8.	-----	24.	-----	12.	-----	0.
---	48.	-----	25.	-----	-7.	-----
E 04	-----	5.7E 04	-----	6248.	-----	527.
---	1615.	-----	135.	-----	0.	-----
E 04	-----	5.5E 04	-----	9828.	-----	874.
---	5037.	-----	205.	-----	27.	-----
E 04	-----	4.1E 04	-----	8598.	-----	780.
---	5037.	-----	750.	-----	67.	-----
6.	-----	5.1E 04	-----	7245.	-----	707.
---	1.2E 04	-----	1402.	-----	93.	-----
4.	-----	2.2E 04	-----	5953.	-----	640.
---	1.1E 04	-----	1611.	-----	120.	-----
0.	-----	1.6E 04	-----	5043.	-----	547.
---	7616.	-----	1783.	-----	153.	-----
3.	-----	1.1E 04	-----	3727.	-----	627.
---	48.	-----	123.	-----	53.	-----
8.	-----	169.	-----	246.	-----	40.
---	72.	-----	123.	-----	33.	-----
9.	-----	193.	-----	234.	-----	47.
---	48.	-----	86.	-----	27.	-----
0.	-----	96.	-----	160.	-----	73.
---	96.	-----	98.	-----	33.	-----
3.	-----	72.	-----	172.	-----	47.
---	217.	-----	160.	-----	47.	-----
4.	-----	48.	-----	25.	-----	80.
---	337.	-----	258.	-----	47.	-----
0.	-----	48.	-----	86.	-----	53.
---	241.	-----	185.	-----	73.	-----
9.	-----	-24.	-----	98.	-----	33.
---	120.	-----	185.	-----	47.	-----
0.	-----	0.	-----	61.	-----	20.

AFF- 62
JP-4 (PET) VS UNLEADED GASOLINE
1981, FEB 5,6

CLOCK		ELAPSED	SIDE 1	SIDE 2
TIME		TIME	PART.750	PART.750
DY	HR.	(MIN)	PART/CC	PART/CC
			TSI-023	TSI-023
1	615	-165	4.	4.
1	725	-95	-4.	-----
1	835	-25	-----	4.
1	905	5	4.	-----
1	915	15	-----	4.
1	1005	65	4.	-----
1	1015	75	-----	81.
1	1105	125	7.	-----
1	1115	135	-----	137.
1	1205	185	18.	-----
1	1215	195	-----	105.
1	1305	245	0.	-----
1	1315	255	-----	109.
1	1405	305	21.	-----
1	1415	313	-----	70.
1	1505	365	21.	-----
1	1515	375	-----	63.
1	1605	425	18.	-----
1	1615	435	-----	60.
2	835	1415	0.	-----
2	845	1425	-----	7.
2	905	1445	11.	-----
2	915	1455	-----	14.
2	1005	1505	14.	-----
2	1015	1515	-----	18.
2	1105	1565	4.	-----
2	1115	1575	-----	7.
2	1205	1625	11.	-----
2	1215	1635	-----	21.
2	1305	1685	7.	-----
2	1315	1695	-----	7.
2	1405	1745	11.	-----
2	1415	1755	-----	4.
2	1505	1805	11.	-----
2	1515	1815	-----	11.

----- NO DATA TAKEN

NOTES

A JUNK PEAK UNDERNEATH
C OBSCURED BY FREON FOR ALL THE REST OF THE POINTS.

AFF- 63
UNLEADED GASOLINE VS JP-4 (PET)
1981, MAR 10

DAY 1 (MARCH 10)
0515: START FILL
0620: END FILL. DEW POINT: -2C; RH=46%
0643: 5 ML NO2 INJECTED
0645: 16 ML NO INJECTED
0650: BAG DIVIDED
0700: INJECTED 370 MICROLITERS JP-4 (PET) INTO SIDE B
0737: INJECTED 370 MICROLITERS UNLEADED GASOLINE INTO SIDE A
1600: COVERED BAG. END DAY 1.

DAY 2 (MARCH 11)
0750: SIDE A HAS ONLY ABOUT 10% LEFT. SIDE B HAS ~60%
0900: UNCOVER FOR DAY 2.
1130: RUN ABORTED BECAUSE OF EXCESSIVE
BAG LEAKAGE

RESULTS	DAY 1	DAY 2
-----	-----	-----
AVG.T(DEG.C)	24(+6)	21(+3)
AVG.UV(MW/CM2)	2.5(+0.9)	2.5(+1.0)

T=0 AT 900 PST

BAG NO. 20 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	23.3	6.3	DEG C	SIDE 1
T	DORIC-1	23.4	5.7	DEG C	SIDE 2
UV RAD	EPPLEY-2	2.50	0.92	MW/CM2	
HCHO	CA	0.053	0.028	PPM	SIDE 2

ID	INST.	INITIAL CONC.	UNITS	
NO	B-NOX-1	0.338	PPM	SIDE 1
NO	B-NOX-1	0.357	PPM	SIDE 2
NO2-UNC	B-NOX-1	0.140	PPM	SIDE 1
NO2-UNC	B-NOX-1	0.140	PPM	SIDE 2
THC	BK6800-1	27.60	PPMC	SIDE 1
THC	BK6800-1	22.70	PPMC	SIDE 2

AFF- 63
UNLEADED GASOLINE VS JP-4 (PET)
1981, MAR 10

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101DX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
880	EG&G	EG&G DEW POINT HYGROMETER
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
2750	SE-52C-2	RM-121; 30M SE-52 QUARTZ CAP. GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
3001	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG

AFF- 63
UNLEADED GASOLINE VS JP-4 (PET)
1981, MAR 10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 OZONE PPM D-1790	SIDE 2 OZONE PPM D-1790	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE NOX-U PPM B-NOX
1 615	-165	0.000	0.000	0.000	0.000	0.000	0.000	0.0
1 825	-35	0.000	-----	0.338	-----	0.140	-----	0.5
1 835	-25	-----	0.000	-----	0.357	-----	0.140	-----
1 905	5	0.009	-----	0.218	-----	0.232	-----	0.4
1 915	15	-----	0.011	-----	0.330	-----	0.163	-----
1 1005	65	0.525	-----	0.009	-----	0.240	-----	0.2
1 1015	75	-----	0.014	-----	0.198	-----	0.273	-----
1 1105	125	0.542	-----	0.013	-----	0.230	-----	0.2
1 1115	135	-----	0.054	-----	0.063	-----	0.390	-----
1 1205	185	0.526	-----	0.019	-----	0.235	-----	0.2
1 1215	195	-----	0.170	-----	0.028	-----	0.393	-----
1 1305	245	0.521	-----	0.027	-----	0.229	-----	0.2
1 1315	255	-----	0.312	-----	0.025	-----	0.347	-----
1 1405	305	0.522	-----	0.028	-----	0.218	-----	0.2
1 1415	315	-----	0.460	-----	0.022	-----	0.295	-----
1 1505	365	0.520	-----	0.032	-----	0.209	-----	0.2
1 1515	375	-----	0.539	-----	0.030	-----	0.249	-----
1 1605	425	0.503	-----	0.032	-----	0.200	-----	0.2
1 1615	435	-----	0.529	-----	0.031	-----	0.171	-----
2 835	1415	0.320	-----	0.043	-----	0.139	-----	0.1
2 845	1425	-----	0.337	-----	0.036	-----	0.086	-----
2 905	1445	0.315	-----	0.045	-----	0.142	-----	0.1
2 915	1455	-----	0.337	-----	0.039	-----	0.087	-----
2 1005	1505	0.287	-----	0.039	-----	0.151	-----	0.1
2 1015	1515	-----	0.332	-----	0.031	-----	0.095	-----
2 1105	1565	0.268	-----	0.039	-----	0.161	-----	0.1
2 1115	1575	-----	0.333	-----	0.032	-----	0.096	-----

----- NO DATA TAKEN

12 NOV 1981

PAGE 3

DE 2 NO PM OX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1
0.000	0.000	0.000	0.000	0.000	1.08	1.08
----	0.140	-----	0.500	-----	27.60	-----
.357	-----	0.140	-----	0.500	-----	22.70
----	0.232	-----	0.492	-----	27.20	-----
.330	-----	0.163	-----	0.500	-----	22.80
----	0.240	-----	0.247	-----	23.50	-----
.198	-----	0.273	-----	0.500	-----	22.40
----	0.230	-----	0.241	-----	22.90	-----
.063	-----	0.390	-----	0.464	-----	22.10
----	0.235	-----	0.251	-----	22.20	-----
.028	-----	0.393	-----	0.423	-----	21.20
----	0.229	-----	0.250	-----	22.00	-----
.025	-----	0.347	-----	0.371	-----	20.80
----	0.218	-----	0.246	-----	21.70	-----
.022	-----	0.295	-----	0.320	-----	20.30
----	0.209	-----	0.241	-----	21.40	-----
.030	-----	0.249	-----	0.280	-----	19.70
----	0.200	-----	0.233	-----	20.90	-----
.031	-----	0.171	-----	0.202	-----	19.60
----	0.139	-----	0.180	-----	20.70	-----
.036	-----	0.086	-----	0.118	-----	19.00
----	0.142	-----	0.190	-----	20.70	-----
.039	-----	0.087	-----	0.123	-----	19.10
----	0.151	-----	0.189	-----	20.50	-----
.031	-----	0.095	-----	0.122	-----	19.00
----	0.161	-----	0.197	-----	20.50	-----
.032	-----	0.096	-----	0.127	-----	18.80

AFF- 63
UNLEADED GASOLINE VS JP-4 (PET)
1981, MAR 10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-2	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMEY	SID #PAR PART CLI
1 615	-165	8.4	8.4	-----	0.0	0.0	0.	---
1 825	-35	17.6	-----	-----	0.0	-----	0.	---
1 835	-25	-----	18.5	-----	-----	0.1	-----	---
1 905	5	20.3	-----	1.68	100.0	-----	0.	---
1 915	15	-----	20.9	1.81	-----	83.0	-----	---
1 1005	65	24.3	-----	1.46	84.0	-----	0.	---
1 1015	75	-----	25.4	1.52	-----	49.0	-----	---
1 1105	125	25.9	-----	3.86	63.0	-----	11.	---
1 1115	135	-----	28.2	3.75	-----	34.0	-----	---
1 1205	185	30.2	-----	3.48	48.0	-----	47.	---
1 1215	195	-----	28.4	3.60	-----	27.0	-----	---
1 1305	245	30.4	-----	2.35	35.0	-----	87.	---
1 1315	255	-----	28.4	2.56	-----	19.0	-----	---
1 1405	305	30.0	-----	2.74	26.0	-----	111.	---
1 1415	315	-----	28.2	3.05	-----	14.0	-----	20
1 1505	365	29.4	-----	1.58	18.5	-----	125.	---
1 1515	375	-----	27.7	1.30	-----	9.5	-----	140
1 1605	425	26.8	-----	-----	14.8	-----	121.	---
1 1615	435	-----	25.8	-----	-----	7.2	-----	330
2 835	1415	18.2	-----	-----	0.1	-----	0.	---
2 845	1425	-----	19.3	-----	-----	0.2	-----	90
2 905	1445	17.9	-----	1.31	0.1	-----	0.	---
2 915	1455	-----	18.8	1.45	-----	1.0	-----	70
2 1005	1505	21.9	-----	2.62	0.0	-----	0.	---
2 1015	1515	-----	23.1	2.89	-----	3.1	-----	60
2 1105	1565	24.6	-----	3.64	0.0	-----	0.	---
2 1115	1575	-----	26.8	3.28	-----	1.9	-----	40

----- NO DATA TAKEN

SIDE 1 CONDENS E3/CC C-143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET
0.0	0.0	0.	0.	0.	0.	0.	0.
0.0	-----	0.	-----	0.	-----	0.	-----
-----	0.1	-----	0.	-----	0.	-----	-----
00.0	-----	0.	-----	0.	-----	0.	-0.
-----	83.0	-----	0.	-----	0.	-----	0.
34.0	-----	0.	-----	0.	-----	-0.	-----
-----	49.0	-----	0.	-----	0.	-----	-0.
33.0	-----	11.	-----	0.	-----	-0.	-----
-----	34.0	-----	0.	-----	0.	-----	-0.
48.0	-----	47.	-----	0.	-----	-0.	-----
-----	27.0	-----	0.	-----	0.	-----	-0.
55.0	-----	87.	-----	0.	-----	-0.	-----
-----	19.0	-----	0.	-----	0.	-----	-0.
36.0	-----	111.	-----	1.	-----	-0.	-----
-----	14.0	-----	26.	-----	0.	-----	-0.
8.5	-----	125.	-----	1.	-----	-0.	-----
-----	9.5	-----	140.	-----	2.	-----	-0.
4.8	-----	121.	-----	1.	-----	-0.	-----
-----	7.2	-----	338.	-----	30.	-----	0.
0.1	-----	0.	-----	0.	-----	-0.	-----
-----	0.2	-----	80.	-----	3.	-----	0.
0.1	-----	0.	-----	0.	-----	0.	-----
-----	1.0	-----	79.	-----	4.	-----	0.
0.0	-----	0.	-----	0.	-----	-0.	-----
-----	3.1	-----	61.	-----	4.	-----	0.
0.0	-----	0.	-----	0.	-----	-0.	-----
-----	1.9	-----	45.	-----	3.	-----	0.

2

AFF- 63
UNLEADED GASOLINE VS JP-4 (PET)
1981, MAR 10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UM3/CC TSI-023	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SI N PI DM
1 610	-170	-----	-----	-----	-----	-----	-----	-----
1 615	-165	0.	0.	378.	378.	1.	1.	0.0
1 730	-90	-----	-----	-----	-----	-----	-----	-----
1 825	-35	0.	-----	588.	-----	1.	-----	-----
1 830	-30	-----	-----	-----	-----	-----	-----	-----
1 835	-25	-----	-0.	-----	354.	-----	-----	0.0
1 905	5	1.	-----	880.	-----	5.	0.	-----
1 915	15	-----	-1.	-----	-23.	-----	-3.	-----
1 1005	65	214.	-----	1.9E 05	-----	7677.	-----	-----
1 1015	75	-----	8.	-----	1.1E 05	-----	664.	-----
1 1105	125	225.	-----	1.2E 05	-----	6963.	-----	-----
1 1115	135	-----	27.	-----	8.4E 04	-----	1319.	-----
1 1205	185	200.	-----	1.0E 05	-----	5677.	-----	-----
1 1215	195	-----	51.	-----	5.4E 04	-----	1955.	-----
1 1305	245	171.	-----	7.6E 04	-----	4674.	-----	-----
1 1315	255	-----	69.	-----	4.4E 04	-----	2180.	-----
1 1405	305	143.	-----	5.5E 04	-----	3757.	-----	-----
1 1415	315	-----	94.	-----	3.2E 04	-----	2461.	-----
1 1505	365	126.	-----	3.4E 04	-----	3123.	-----	-----
1 1515	375	-----	103.	-----	2.6E 04	-----	2345.	-----
1 1605	425	100.	-----	3.0E 04	-----	2477.	-----	0.0
1 1615	435	-----	107.	-----	1.8E 04	-----	2143.	-----
2 805	1385	-----	-----	-----	-----	-----	-----	-----
2 835	1415	1.	-----	854.	-----	20.	-----	-----
2 845	1425	-----	2.	-----	323.	-----	29.	-----
2 905	1445	1.	-----	157.	-----	16.	-----	0.05
2 915	1455	-----	2.	-----	322.	-----	25.	-----
2 1005	1505	1.	-----	-121.	-----	12.	-----	-----
2 1015	1515	-----	9.	-----	6617.	-----	270.	-----
2 1105	1565	1.	-----	275.	-----	15.	-----	-----
2 1115	1575	-----	14.	-----	5011.	-----	365.	-----

----- NO DATA TAKEN

301

DE 2 R.N T/CC -023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 1 N-C4 PPM DMS-1	SIDE 2 N-C4 PPM DMS-1	SIDE 1 I-CS PPM DMS-1	SIDE 2 I-CS PPM DMS-1
-----	-----	-----	0.0010	0.0010	0.0000	0.0000
78.	1.	1.	-----	-----	-----	-----
-----	-----	-----	-----	0.0087	-----	0.0338
-----	1.	-----	-----	-----	-----	-----
-----	-----	-----	0.0599	-----	-----	-----
54.	-----	0.	-----	-----	-----	-----
-----	5.	-----	-----	-----	-----	-----
23.	-----	-3.	-----	-----	-----	-----
-----	7677.	-----	-----	-----	-----	-----
1E 05	-----	664.	-----	-----	-----	-----
-----	6963.	-----	-----	-----	-----	-----
4E 04	-----	1319.	-----	-----	-----	-----
-----	5677.	-----	-----	-----	-----	-----
4E 04	-----	1955.	-----	-----	-----	-----
-----	4674.	-----	-----	-----	-----	-----
4E 04	-----	2180.	-----	-----	-----	-----
-----	3757.	-----	-----	-----	-----	-----
2E 04	-----	2461.	-----	-----	-----	-----
-----	3123.	-----	-----	-----	-----	-----
6E 04	-----	2345.	-----	0.0083	-----	0.0316
-----	2477.	-----	0.0529	-----	0.2243	-----
8E 04	-----	2143.	-----	-----	-----	-----
-----	-----	-----	-----	0.0082	-----	0.0310
-----	20.	-----	-----	-----	-----	-----
23.	-----	29.	-----	-----	-----	-----
-----	16.	-----	0.0527	-----	0.2359	-----
22.	-----	25.	-----	-----	-----	-----
-----	12.	-----	-----	-----	-----	-----
17.	-----	270.	-----	-----	-----	-----
-----	15.	-----	-----	-----	-----	-----
011.	-----	365.	-----	-----	-----	-----

AFF- 63
UNLEADED GASOLINE VS JP-4 (PET)
1981, MAR 10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 N-C5 PPM DMS-1	SIDE 2 N-C5 PPM DMS-1	SIDE 1 N-C6 PPM DMS-1	SIDE 1 N-C6 PPM SE-52C-2	SIDE 2 N-C6 PPM DMS-1	SIDE 2 N-C6 PPM SE-52C-2	SID N- PP SE-5
1 610	-170	0.0000	0.0000	-----	-----	-----	-----	---
1 730	-90	-----	0.0494	-----	-----	0.0987	0.1038	---
1 830	-30	0.0868	-----	0.0867	0.5579	-----	-----	0.0
1 1005	65	-----	-----	-----	0.0996	-----	-----	0.0
1 1115	135	-----	-----	-----	-----	-----	0.1041	---
1 1205	185	-----	-----	-----	0.0898	-----	-----	0.0
1 1315	255	-----	-----	-----	-----	-----	0.1002	---
1 1405	305	-----	-----	-----	0.0929	-----	-----	0.0
1 1515	375	-----	0.0462	-----	-----	0.0912	0.0978	---
1 1605	425	0.0780	-----	0.0826	0.0949	-----	-----	0.0
2 805	1385	-----	0.0458	-----	-----	0.0911	0.0974	---
2 905	1445	0.0761	-----	0.0785	0.0897	-----	-----	0.0
2 1020	1520	-----	-----	-----	-----	-----	0.0964	---
2 1105	1565	-----	-----	-----	0.0882	-----	-----	0.0

----- NO DATA TAKEN

	SIDE 2 N-C6 PPM	SIDE 2 N-C6 PPM	SIDE 1 N-C7 PPM	SIDE 2 N-C7 PPM	SIDE 2 MECYC-C6 PPM	SIDE 1 N-C8 PPM	SIDE 2 N-C8 PPM
-2	DMS-1	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2
-	-----	-----	-----	-----	-----	-----	-----
-	0.0987	0.1038	-----	0.1351	0.0959	-----	0.1253
9	-----	-----	0.0746	-----	-----	0.0378	-----
6	-----	-----	0.0658	-----	-----	0.0337	-----
-	-----	0.1041	-----	0.1323	0.0944	-----	0.1221
8	-----	-----	0.0625	-----	-----	0.0298	-----
-	-----	0.1002	-----	0.1268	0.0896	-----	0.1186
9	-----	-----	0.0614	-----	-----	0.0298	-----
-	0.0912	0.0978	-----	0.1227	0.0859	-----	0.1126
9	-----	-----	0.0599	-----	-----	0.0266	-----
-	0.0911	0.0974	-----	0.1224	0.0841	-----	0.1102
7	-----	-----	0.0613	-----	-----	0.0298	-----
-	-----	0.0964	-----	0.1215	0.0838	-----	0.1098
2	-----	-----	0.0609	-----	-----	0.0302	-----

AFF- 63
UNLEADED GASOLINE VS JP-4 (PET)
1981, MAR 10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 N-C9 PPM SE-52C-2	SIDE 2 N-C9 PPM SE-52C-2	SIDE 2 N-C10 PPM SE-52C-2	SIDE 2 N-C11 PPM SE-52C-2	SIDE 2 N-C12 RAW DATA SE-52C-2	SIDE 1 BENZENE PPM 10'C-600	SIDE 1 TOLUENE PPM 10'C-600	SIDE 2 TOLUENE PPM 10'C-600
1 610	-170	-----	-----	-----	-----	-----	-----	0.0001	0.0001
1 730	-90	-----	0.0687	0.0486	0.0542	1.4E 04	-----	-----	0.0346
1 830	-30	0.0124	-----	-----	-----	-----	0.0619	0.5068	-----
1 1005	65	0.0097	-----	-----	-----	-----	-----	-----	-----
1 1115	135	-----	0.0672	0.0493	0.5593	1.3E 04	-----	-----	-----
1 1205	185	0.0101	-----	-----	-----	-----	-----	-----	-----
1 1315	255	-----	0.0622	0.0459	0.0473	1.2E 04	-----	-----	-----
1 1405	305	0.0096	-----	-----	-----	-----	-----	-----	-----
1 1515	375	-----	0.0590	0.0434	0.0449	9546.	-----	-----	0.0301
1 1605	425	0.0070	-----	-----	-----	-----	0.0578	0.4211	-----
2 805	1385	-----	0.0552	0.0389	0.0375	7380.	-----	-----	0.0264
2 905	1445	-----	-----	-----	-----	-----	0.0609	0.4324	-----
2 1020	1520	-----	0.0588	0.0417	0.0433	9170.	-----	-----	-----
2 1105	1565	0.0102	-----	-----	-----	-----	-----	-----	-----

----- NO DATA TAKEN

AFF- 63
UNLEADED GASOLINE VS JP-4 (PET)
1981, MAR 10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 O-XYL PPM 10'C-600	SIDE 1 O-XYL PPM SE-52C-2	SIDE 2 O-XYL PPM 10'C-600	SIDE 2 O-XYL PPM SE-52C-2	SIDE 2 M-XYL PPM SE-52C-2	SIDE 1 C2BENZ PPM SE-52C-2	SIDE C2SE PPM SE-52
1 610	-170	-----	-----	-----	-----	-----	-----	-----
1 730	-90	-----	-----	-----	0.0168	0.0461	-----	0.01
1 830	-30	0.1190	0.1340	-----	-----	-----	0.0838	-----
1 1005	65	-----	0.1178	-----	-----	-----	0.0791	-----
1 1115	135	-----	-----	-----	0.0171	0.0450	-----	0.01
1 1205	185	-----	0.1079	-----	-----	-----	0.0750	-----
1 1315	255	-----	-----	-----	0.0160	0.0368	-----	0.01
1 1405	305	-----	0.1029	-----	-----	-----	0.0730	-----
1 1515	375	-----	-----	0.0040	0.0151	0.0378	-----	0.01
1 1605	425	0.0847	0.0937	-----	-----	-----	0.0692	-----
2 805	1385	-----	-----	0.0045	0.0139	0.0355	-----	0.01
2 905	1445	0.0878	0.0902	-----	-----	-----	0.0672	-----
2 1020	1520	-----	-----	-----	0.0149	0.0360	-----	0.01
2 1105	1565	-----	0.0927	-----	-----	-----	0.0682	-----

----- NO DATA TAKEN

2	SIDE 2	SIDE 1	SIDE 2	SIDE 2	SIDE 2	SIDE 1	SIDE 2
YL	M-XYL	C2BENZ	C2BENZ	I-C3-BZ	N-C3-BZ	124TMEBZ	124TMEBZ
	PPM	PPM	PPM	PPM	PPM	PPM	PPM
SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2	SE-52C-2
168	0.0461	-----	0.0139	0.0092	0.0160	-----	0.0316
-----	-----	0.0838	-----	-----	-----	0.1300	-----
-----	-----	0.0791	-----	-----	-----	0.0921	-----
171	0.0450	-----	0.0141	0.0097	0.0173	-----	0.0335
-----	-----	0.0750	-----	-----	-----	0.0753	-----
160	0.0368	-----	0.0137	0.0079	0.0178	-----	0.0293
-----	-----	0.0730	-----	-----	-----	0.0687	-----
151	0.0378	-----	0.0122	0.0072	0.0148	-----	0.0287
-----	-----	0.0692	-----	-----	-----	0.0621	-----
139	0.0355	-----	0.0120	0.0065	0.0138	-----	0.0213
-----	-----	0.0672	-----	-----	-----	0.0554	-----
149	0.0360	-----	0.0126	0.0062	0.0153	-----	0.0223
-----	-----	0.0682	-----	-----	-----	0.0506	-----

AFF- 63
UNLEADED GASOLINE VS JP-4 (PET)
1981, MAR 10

CLOCK TIME		ELAPSE TIME	SIDE 1 M+P-XYL PPM 10'C-600	SIDE 2 M+P-XYL PPM 10'C-600	SIDE 1 CO PPM BK6800-1	SIDE 2 CO PPM BK6800-1	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA	SIDE ACETO PPM 10'C-
DAY	HR.	(MIN)							
1	610	-170	-----	-----	-----	-----	-----	-----	0.00
1	615	-165	-----	-----	0.43	0.43	-----	-----	-----
1	730	-90	-----	-----	-----	-----	-----	-----	-----
1	825	-35	-----	-----	0.56	-----	-----	-----	-----
1	830	-30	0.3704	-----	-----	-----	-----	-----	0.26
1	835	-25	-----	-----	-----	0.55	-----	-----	-----
1	840	-20	-----	-----	-----	-----	0.048	0.020	-----
1	905	5	-----	-----	0.60	-----	-----	-----	-----
1	915	15	-----	-----	-----	0.54	-----	-----	-----
1	1005	65	-----	-----	0.66	-----	-----	-----	-----
1	1015	75	-----	-----	-----	0.61	-----	-----	-----
1	1105	125	-----	-----	0.96	-----	-----	-----	-----
1	1115	135	-----	-----	-----	0.62	-----	-----	-----
1	1200	180	-----	-----	-----	-----	0.151	0.036	-----
1	1205	185	-----	-----	1.08	-----	-----	-----	-----
1	1215	195	-----	-----	-----	0.75	-----	-----	-----
1	1305	245	-----	-----	1.04	-----	-----	-----	-----
1	1315	255	-----	-----	-----	0.99	-----	-----	-----
1	1405	305	-----	-----	1.03	-----	-----	-----	-----
1	1415	315	-----	-----	-----	1.07	-----	-----	-----
1	1505	365	-----	-----	1.12	-----	-----	-----	-----
1	1515	375	-----	0.0250	-----	0.89	-----	-----	-----
1	1600	420	-----	-----	-----	-----	0.213	0.052	-----
1	1605	425	0.2146	-----	1.13	-----	-----	-----	0.13
1	1615	435	-----	-----	-----	1.10	-----	-----	-----
2	805	1385	-----	0.0231	-----	-----	-----	-----	-----
2	830	1410	-----	-----	-----	-----	0.247	0.066	-----
2	835	1415	-----	-----	1.23	-----	-----	-----	-----
2	845	1425	-----	-----	-----	0.91	-----	-----	-----
2	905	1445	0.2157	-----	1.18	-----	-----	-----	0.20
2	915	1455	-----	-----	-----	0.81	-----	-----	-----
2	1005	1505	-----	-----	1.20	-----	-----	-----	-----
2	1015	1515	-----	-----	-----	0.98	-----	-----	-----
2	1105	1565	-----	-----	1.29	-----	-----	-----	-----
2	1115	1575	-----	-----	-----	1.05	-----	-----	-----
2	1145	1605	-----	-----	-----	-----	0.254	0.092	-----

----- NO DATA TAKEN

	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA	SIDE 1 ACETONE PPM 10'C-600	SIDE 1 DEW PT DEG C EG&G	SIDE 2 DEW PT DEG C EG&G	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023
2			0.0009				
0-1				-2.0	-2.0	334.	334.
						501.	
			0.2654				334.
	0.048	0.020				1002.	
							0.
						4676.	
							5.8E 04
						-2839.	
							3.8E 04
	0.151	0.036					
						2.4E 04	
							6513.
						1.5E 04	
							0.
						9018.	
							4008.
						-4342.	
							4008.
	0.213	0.052					
			0.1352			3006.	
							668.
	0.247	0.066				668.	
				2.0			167.
					-2.0		
			0.2003			167.	
							0.
						-167.	
							501.
						334.	
							167.
	0.254	0.092					

AFF- 63
UNLEADED GASOLINE VS JP-4 (PET)
1981, MAR 10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.042 TSI-023	SIDE 2 PART.042 TSI-023	SIDE 1 PART.075 TSI-023	SIDE 2 PART.075 TSI-023	SIDE 1 PART.133 TSI-023	SIDE 2 PART.133 TSI-023	SI PAR TSI
1 615	-165	0.	0.	44.	44.	0.	0.	
1 825	-35	87.	-----	0.	-----	0.	-----	
1 835	-25	-----	0.	-----	44.	-----	-24.	
1 905	5	-87.	-----	-44.	-----	0.	-----	
1 915	15	-----	0.	-----	-44.	-----	0.	
1 1005	65	1.1E 04	-----	9.8E 04	-----	7.2E 04	-----	74
1 1015	75	-----	3.1E 04	-----	1.6E 04	-----	1518.	
1 1105	125	0.	-----	4.2E 04	-----	6.7E 04	-----	1.0
1 1115	135	-----	0.	-----	3.8E 04	-----	8001.	
1 1205	185	0.	-----	1.7E 04	-----	5.3E 04	-----	920
1 1215	195	-----	0.	-----	2.7E 04	-----	1.9E 04	
1 1305	245	0.	-----	9946.	-----	4.1E 04	-----	858
1 1315	255	-----	0.	-----	2.2E 04	-----	1.7E 04	
1 1405	305	0.	-----	7903.	-----	3.0E 04	-----	775
1 1415	315	-----	0.	-----	2220.	-----	2.0E 04	
1 1505	365	2784.	-----	5772.	-----	2.2E 04	-----	685
1 1515	375	-----	1479.	-----	400.	-----	1.4E 04	
1 1605	425	87.	-----	3463.	-----	1.7E 04	-----	564
1 1615	435	-----	1827.	-----	178.	-----	8411.	
2 835	1415	87.	-----	-44.	-----	120.	-----	
2 845	1425	-----	0.	-----	89.	-----	0.	
2 905	1445	-87.	-----	0.	-----	24.	-----	
2 915	1455	-----	348.	-----	-89.	-----	0.	
2 1005	1505	-87.	-----	44.	-----	72.	-----	
2 1015	1515	-----	609.	-----	2797.	-----	2410.	
2 1105	1565	-174.	-----	44.	-----	48.	-----	
2 1115	1575	-----	174.	-----	888.	-----	3037.	

----- NO DATA TAKEN

12 NOV 1981
PAGE 10

DE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
T.075	PART.133	PART.133	PART.237	PART.237	PART.422	PART.422
T/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
44.	0.	0.	0.	0.	0.	0.
---	0.	---	0.	---	0.	---
44.	---	-24.	---	0.	---	0.
---	0.	---	12.	---	-7.	---
44.	---	0.	---	25.	---	0.
---	7.2E 04	---	7417.	---	600.	---
6E 04	---	1518.	---	123.	---	0.
---	6.7E 04	---	1.0E 04	---	874.	---
8E 04	---	8001.	---	480.	---	53.
---	5.3E 04	---	9200.	---	920.	---
7E 04	---	1.9E 04	---	1587.	---	160.
---	4.1E 04	---	8585.	---	827.	---
8E 04	---	1.7E 04	---	3309.	---	287.
---	3.0E 04	---	7737.	---	734.	---
20.	---	2.0E 04	---	5301.	---	494.
---	2.2E 04	---	6839.	---	680.	---
00.	---	1.4E 04	---	6052.	---	627.
---	1.7E 04	---	5646.	---	587.	---
78.	---	8411.	---	5732.	---	800.
---	120.	---	12.	---	7.	---
89.	---	0.	---	37.	---	27.
---	24.	---	49.	---	0.	---
9.	---	0.	---	49.	---	7.
---	72.	---	12.	---	0.	---
7.	---	2410.	---	246.	---	47.
---	48.	---	12.	---	7.	---
8.	---	3037.	---	664.	---	67.

2

AFF- 63
UNLEADED GASOLINE VS JP-4 (PET)
1981, MAR 10

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.750 PART/CC TSI-023	SIDE 2 PART.750 PART/CC TSI-023
1 615	-165	0.	0.
1 825	-35	0.	-----
1 835	-25	-----	0.
1 905	5	4.	-----
1 915	15	-----	-4.
1 1005	65	126.	-----
1 1015	75	-----	0.
1 1105	125	130.	-----
1 1115	135	-----	14.
1 1205	185	137.	-----
1 1215	195	-----	18.
1 1305	245	116.	-----
1 1315	255	-----	39.
1 1405	305	102.	-----
1 1415	315	-----	56.
1 1505	365	102.	-----
1 1515	375	-----	88.
1 1605	425	70.	-----
1 1615	435	-----	116.
2 835	1415	4.	-----
2 845	1425	-----	4.
2 905	1445	4.	-----
2 915	1455	-----	7.
2 1005	1505	4.	-----
2 1015	1515	-----	7.
2 1105	1565	4.	-----
2 1115	1575	-----	14.

----- NO DATA TAKEN

AFF- 64
DIESEL STATIC
1981, MAR 17-18

DAY 1 (MARCH 17)

0746: BAG FILLED WITH ~35% R.H. PURE AIR
0600: START FILL. WET: 10.0 PSIG, DRY: 0.0 PSIG RH=36%
0742: INJECTED 5 ML NO2
0744: INJECTED 16 ML NO
0747: INJECTED 400 ML FREON 12
0755: INJECTED 1500 MICROLITERS DIESEL FUEL, USING HEATED INJECTION
TUBE, FOR 30 MINUTES AT 200 C.
0905: T=0, UNCOVER BAG
1530: PLACED TEFLON COVER OVER BAG.
1610: END DAY 1

DAY 2 (MARCH 18)

0830: START SAMPLING FOR DAY 2.
1500: HIGH CLOUDS ARE COMING IN.
1545: QUITE CLOUDY NOW.
1610: SAMPLING OVER FOR DAY 2.

DAY 3 (MARCH 19)

0815: BAD LEAK FOUND IN BAG, RUN ABORTED.

RESULTS	DAY 1	DAY 2
-----	-----	-----
AVG.T(DEG.C)	24(+3)	24(+4)
AVG.UV(MW/CM2)	2.0(+0.9)	1.6(+0.8)

NOTES:-TEMPERATURE USED IN FUEL INJECTION TOO LOW.
PROBABLY LESS OF THE HEAVIER FUEL COMPONENTS
WERE INJECTED THAN IN SUBSEQUENT DIESEL RUNS.
-BYRON DATA NOT CONSIDERED TO BE RELIABLE
AND IS NOT USED.

T=0 AT 905 PST

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	23.1	4.9	DEG C
UV RAD	EPPLEY-2	1.71	0.81	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.308	PPM
NO2-UNC	B-NOX-1	0.113	PPM
THC	BK6800-1	8.46	PPMC

AFF- 64
DIESEL STATIC
1981, MAR 17-18

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
2100	PN-1	RM-121 POROPAK-N GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
880	EG&G	EG&G DEW POINT HYGROMETER
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12" 5% CARBOWAX-600 GC; ECD
4250	BYRON	BYRON 401 HYDROCARBON ANALYZER
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	NMHC PPMC BYRON	THC PPMC BK6800-1	T DEG DORIC
1 710	-115	0.000	0.005	0.003	0.008	-----	1.16	11.
1 845	-20	0.081 E	0.308	0.113	0.433	19.00	8.46	18.
1 1005	60	0.081	0.161	0.224	0.408	18.00	8.96	22.
1 1105	120	0.068	0.078	0.290	0.373	18.80	8.60	22.
1 1205	180	0.163	0.037	0.300	0.335	18.50	8.85	27.
1 1305	240	0.239	0.026	0.252	0.273	18.00	8.80	26.
1 1405	300	0.342	0.022	0.187	0.209	16.80	8.71	27.
1 1505	360	0.416	0.027	0.132	0.151	-----	8.51	25.
1 1605	420	0.426	0.025	0.091	0.111	17.20	8.36	24.
2 835	1410	0.223	0.029	0.057	0.080	15.20	7.93	17.
2 905	1440	0.229	0.032	0.058	0.085	16.60	8.12	18.
2 1005	1500	0.214	0.032	0.062	0.086	15.90	8.30	22.
2 1105	1560	0.242	0.028	0.067	0.088	16.20	-----	27.
2 1205	1620	0.267	0.026	0.067	0.087	15.80	-----	26.
2 1305	1680	0.275	0.029	0.069	0.087	15.80	-----	29.
2 1405	1740	0.287	0.029	0.062	0.085	16.00	8.85	28.
2 1505	1800	0.269	0.029	0.061	0.081	16.20	8.11	25.
2 1605	1860	0.256	0.028	0.057	0.080	15.50	7.90	22.
3 815	2830	0.003 D	0.041	0.053	0.091	0.70	-----	15.

----- NO DATA TAKEN

SAMPLING
RATE
(ML/MIN)

D
FID
GC; FID
MD:3030
76-148
TR;SN143

0038-2
50

61479
ECD

R BAG

OX-UNC PPM -NOX-1	NMHC PPMC BYRON	THC PPMC BK6800-1	T DEG C DORIC-1	DEW PT DEG C EG&S	UV RAD MW/CM2 EPPLEY-2	CONDENS 10E3/CC CNC-143	#PART>.3 PART/CC CLIMET
0.008	-----	1.16	11.6	-3.0	-----	0.1	0.
0.433	19.00	8.46	18.2	-----	-----	0.3	546.
0.408	18.00	8.96	22.0	-----	1.94	1.5	528.
0.373	18.80	8.60	22.6	-----	2.31	1.3	516.
0.335	18.50	8.85	27.0	-----	3.06	1.4	512.
0.273	18.00	8.80	26.0	-----	2.61	0.8	526.
0.209	16.80	8.71	27.2	-----	2.27	0.3	554.
0.151	-----	8.51	25.8	-----	1.41	0.2	553.
0.111	17.20	8.36	24.0	-----	0.71	0.1	483.
0.080	15.20	7.93	17.8	-----	1.05	3.9	33.
0.085	16.60	8.12	18.7	-----	1.27	3.0	64.
0.086	15.90	8.30	22.4	-----	1.57	1.5	287.
0.088	16.20	-----	27.0	-----	2.43	0.7	391.
0.087	15.80	-----	26.9	-----	2.57	0.6	420.
0.087	15.80	-----	29.6	-----	2.35	0.4	444.
0.085	16.00	8.85	28.6	-----	1.75	0.3	494.
0.081	16.20	8.11	25.5	-----	0.82	0.1	436.
0.080	15.50	7.90	22.3	-----	0.41	0.1	383.
0.091	0.70	-----	15.2	-----	0.60	10.0	76.

2

AFF- 64
DIESEL STATIC
1981, MAR 17-18

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	#PART>.5 PART/CC CLIMET	#PART>1 PART/CC CLIMET	AER.V UM3/CC TSI-023	AER.N PART/CC TSI-023	AER.S UM2/CC TSI-023	MECYC-C6 PPM VAR 3700	N- PP VAR
1 710	-115	0.	0.	0.	51.	1.	-----	---
1 845	-20	508.	367.	35.	5605.	591.	0.0030	0.0
1 1005	60	465.	276.	36.	5457.	566.	0.0032	0.0
1 1105	120	426.	203.	35.	3137.	496.	0.0033	0.0
1 1205	180	413.	174.	40.	2939.	531.	0.0023	0.0
1 1305	240	422.	188.	42.	1823.	509.	0.0033	0.0
1 1405	300	422.	191.	30.	1007.	353.	-----	---
1 1505	360	455.	187.	20.	943.	230.	-----	---
1 1605	420	472.	161.	14.	1019.	177.	-----	---
2 835	1410	5.	0.	18.	8264.	522.	-----	---
2 905	1440	10.	0.	37.	4795.	741.	-----	---
2 1005	1500	6.	1.	41.	4470.	722.	-----	---
2 1105	1560	189.	13.	43.	2792.	653.	-----	---
2 1205	1620	343.	33.	38.	2825.	536.	-----	---
2 1305	1680	272.	64.	35.	2483.	487.	-----	---
2 1405	1740	277.	55.	30.	2114.	422.	-----	---
2 1505	1800	299.	57.	27.	1418.	353.	-----	---
2 1605	1860	297.	46.	16.	1032.	231.	-----	---
3 815	2830	4.	0.	9.	1.8E 04	313.	-----	---

----- NO DATA TAKEN

12 NOV 1981

PAGE 3

AER.N PART/CC SI-023	AER.S UM2/CC TSI-023	MECYC-C6 PPM VAR 3700	N-C8 PPM VAR 3700	N-C9 PPM VAR 3700	N-C10 PPM VAR 3700	N-C11 PPM VAR 3700	N-C12 PPM VAR 3700
51.	1.	-----	-----	-----	-----	-----	-----
5605.	591.	0.0030	0.0015	0.0029	0.0046	0.0082	0.0109
5457.	566.	0.0032	0.0017	0.0027	0.0047	0.0082	0.0120
3137.	496.	0.0033	0.0022	0.0034	0.0055	0.0113	0.0141
2939.	531.	0.0023	0.0014	0.0027	0.0044	0.0088	0.0116
1823.	509.	0.0033	0.0027	0.0036	0.0060	0.0092	0.0127
1007.	353.	-----	-----	-----	-----	-----	-----
943.	230.	-----	-----	-----	-----	-----	-----
1019.	177.	-----	-----	-----	-----	-----	-----
8264.	522.	-----	-----	-----	-----	-----	-----
4795.	741.	-----	-----	-----	-----	-----	-----
4470.	722.	-----	-----	-----	-----	-----	-----
2792.	653.	-----	-----	-----	-----	-----	-----
2825.	536.	-----	-----	-----	-----	-----	-----
2483.	487.	-----	-----	-----	-----	-----	-----
2114.	422.	-----	-----	-----	-----	-----	-----
1418.	353.	-----	-----	-----	-----	-----	-----
1032.	231.	-----	-----	-----	-----	-----	-----
1.8E 04	313.	-----	-----	-----	-----	-----	-----

2

AFF- 64
DIESEL STATIC
1981, MAR 17-18

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	N-C13 PPM VAR 3700	BENZENE PPM 10'C-600	TOLUENE PPM VAR 3700	TOLUENE PPM 10'C-600	O-XYL PPM VAR 3700	M-XYL PPM VAR 3700	N-C PPM VAR
1 710	-115	-----	-----	-----	-----	-----	-----	-----
1 715	-110	-----	-----	-----	-----	-----	-----	-----
1 845	-20	0.0254	0.0008	0.0034	0.0044	0.0017	0.0041	0.0000
1 1005	60	0.0249	-----	0.0033	-----	0.0018	0.0034	0.0000
1 1105	120	0.0316	-----	0.0037	-----	0.0017	0.0044	0.0000
1 1205	180	0.0234	-----	0.0025	-----	0.0013	0.0032	0.0000
1 1305	240	0.0246	-----	0.0037	-----	0.0018	0.0048	0.0000
1 1405	300	-----	-----	-----	-----	-----	-----	-----
1 1505	360	-----	-----	-----	-----	-----	-----	-----
1 1605	420	-----	-----	-----	0.0037	-----	-----	-----
2 835	1410	-----	-----	-----	-----	-----	-----	-----
2 905	1440	-----	0.0009 C	-----	0.0045	-----	-----	-----
2 1005	1500	-----	-----	-----	-----	-----	-----	-----
2 1105	1560	-----	-----	-----	-----	-----	-----	-----
2 1205	1620	-----	-----	-----	-----	-----	-----	-----
2 1305	1680	-----	-----	-----	-----	-----	-----	-----
2 1405	1740	-----	-----	-----	-----	-----	-----	-----
2 1505	1800	-----	-----	-----	-----	-----	-----	-----
2 1605	1860	-----	0.0005 C	-----	0.0050	-----	-----	-----
3 815	2830	-----	-----	-----	-----	-----	-----	-----

----- NO DATA TAKEN

12 NOV 1981

PAGE 4

LUENE PPM C-600	O-XYL PPM VAR 3700	M-XYL PPM VAR 3700	N-C14 PPM VAR 3700	N-C15 PPM VAR 3700	FREON 12 RAW DATA DMS-1	CO PPM BYRON	CO PPM BK6800-1
-----	-----	-----	-----	-----	-----	-----	1.66
-----	-----	-----	-----	-----	0.000	-----	-----
0.0044	0.0017	0.0041	0.0176	0.0196	412.7	1.32	2.04
-----	0.0018	0.0034	0.0186	0.0514	-----	1.48	2.12
-----	0.0017	0.0044	0.0170	0.0490	-----	1.41	2.22
-----	0.0013	0.0032	0.0188	0.0424	-----	1.49	2.19
-----	0.0018	0.0048	0.0651	0.0341	-----	1.46	2.19
-----	-----	-----	-----	-----	-----	1.62	2.24
-----	-----	-----	-----	-----	-----	-----	2.27
0.0037	-----	-----	-----	-----	383.0	1.90	2.31
-----	-----	-----	-----	-----	-----	1.79	2.30
0.0045	-----	-----	-----	-----	310.3 A	1.75	2.34
-----	-----	-----	-----	-----	-----	1.81	2.45
-----	-----	-----	-----	-----	-----	1.90	-----
-----	-----	-----	-----	-----	-----	1.68	-----
-----	-----	-----	-----	-----	-----	2.19	-----
-----	-----	-----	-----	-----	-----	2.10	2.55
-----	-----	-----	-----	-----	-----	1.78	2.82
0.0050	-----	-----	-----	-----	255.0	1.86	2.60
-----	-----	-----	-----	-----	-----	1.13	-----

AFF- 64
DIESEL STATIC
1981, MAR 17-18

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	PAN PPM ECD-3	HCHO PPM CA	PART.024 PART/CC TSI-023	PART.042 PART/CC TSI-023	PART.075 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART. PART/ TSI-0
1 710	-115	-----	-----	-167.	174.	44.	0.	0
1 845	-20	-----	-----	1503.	174.	799.	1470.	1316
1 855	-10	-----	0.007	-----	-----	-----	-----	-----
1 1005	60	0.000	-----	2338.	435.	355.	723.	1193
1 1105	120	0.000	-----	1169.	-261.	355.	651.	836
1 1200	175	-----	0.036	-----	-----	-----	-----	-----
1 1205	180	0.000	-----	1169.	174.	-44.	337.	849
1 1305	240	0.000	-----	501.	174.	0.	72.	590
1 1405	300	-----	-----	167.	87.	44.	24.	308
1 1505	360	0.000	-----	334.	87.	44.	72.	172
1 1600	415	-----	0.065	-----	-----	-----	-----	-----
1 1605	420	0.000	-----	334.	-87.	222.	193.	209
2 835	1410	-----	-----	501.	783.	1199.	4675.	1009
2 840	1415	-----	0.106	-----	-----	-----	-----	-----
2 905	1440	0.000	-----	-501.	609.	133.	1591.	2767
2 1005	1500	0.000	-----	334.	348.	-44.	1398.	2042
2 1105	1560	0.000	-----	0.	261.	178.	362.	1488
2 1200	1615	-----	0.110	-----	-----	-----	-----	-----
2 1205	1620	-----	-----	334.	435.	266.	386.	947
2 1305	1680	-----	-----	668.	-261.	311.	554.	824
2 1405	1740	-----	-----	167.	174.	133.	627.	677
2 1505	1800	-----	-----	0.	87.	133.	337.	590
2 1600	1855	-----	0.111	-----	-----	-----	-----	-----
2 1605	1860	-----	-----	167.	0.	44.	193.	443
3 815	2830	-----	-----	9519.	2784.	3463.	2121.	406

----- NO DATA TAKEN

NOTES

- A A PREVIOUS SAMPLE TAKEN ON THIS INSTRUMENT WAS STILL COMING OUT SO BASEL
- A SUBJECTIVE.
- B RETENTION TIME IS .97 AS VERSUS .94
- C SUBJECTIVE BASELINES.
- D DATA NO GOOD. BAG LEAKED.
- E POSSIBLE INTERFERENCE BY FUEL COMPONENTS ON OZONE MONITOR.

.042 /CC 023	PART.075 PART/CC TSI-023	PART.133 PART/CC TSI-023	PART.237 PART/CC TSI-023	PART.422 PART/CC TSI-023	PART.750 PART/CC TSI-023
4.	44.	0.	0.	0.	0.
4.	799.	1470.	1316.	287.	56.
5.	355.	723.	1193.	354.	60.
1.	355.	651.	836.	313.	74.
4.	-44.	337.	849.	367.	88.
4.	0.	72.	590.	380.	105.
7.	44.	24.	308.	307.	70.
7.	44.	72.	172.	180.	53.
7.	222.	193.	209.	113.	35.
3.	1199.	4675.	1009.	93.	4.
7.	133.	1591.	2767.	153.	42.
8.	-44.	1398.	2042.	340.	53.
1.	178.	362.	1488.	434.	70.
5.	266.	386.	947.	387.	70.
1.	311.	554.	824.	313.	74.
4.	133.	627.	677.	273.	63.
7.	133.	337.	590.	207.	63.
0.	44.	193.	443.	153.	32.
4.	3463.	2121.	406.	20.	11.

WAS STILL COMING OUT SO BASELINES ARE

ON OZONE MONITOR.

AFF- 65
NOX-AIR IRRADIATION
1981, MAR 24

1006: START FILL WITH 20% R.H. PURE AIR
1115: 5 ML. NO2 INJECTED
1117: 16 ML. NO INJECTED
1119: 0.4 ML. PROPANE + 0.4 ML. PROPENE INJECTED
1122: MIX BAG
1215: BAG UNCOVERED, T=0
1420: RUN OVER

RESULTS:

CALC. AVG. OH = $30.8 * D \ln(\text{PROPANE}/\text{PROPENE})/DT = \sim 0.01 \text{ PPT}$
CALC. RAD. INPUT = $16.0 * (\text{AVG.OH}) * (60/\text{MIN.AVG.NO2}) = \sim 0.02 \text{ PPB/MIN}$
 $-D(\text{NO})/DT = 0.27 \text{ PPB/MIN}$

T=0 AT 1215 PST

BAG NO. 21 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	29.0	1.2	DEG C
DEW PT	EG&G	1.5		DEG C
UV RAD	EPPLEY	2.68	0.45	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.321	PPM
NO2-UNC	B-NOX-1	0.092	PPM
PROPANE	DMS-1	0.0133	PPM
PROPENE	DMS-1	0.0107	PPM

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4130	EPPLEY	ARB LAB; EPPLEY 11692 UV RADIOMETER
4250	BYRON	BYRON 401 HYDROCARBON ANALYZER
880	EG&G	EG&G DEW POINT HYGROMETER
2200	DMS-1	RH-121; DIMETHYLSULFOLANE GC; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
2100	PN-1	PM-121 POROPAK-N GC; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

AFF- 65
NOX-AIR IRRADIATION
1981, MAR 24

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	PROPANE PPM DMS-1	PROPENE PPM DMS-1	LNC
1 1205	-10	0.001	0.321	0.092	0.429	-----	-----	---
1 1215	0	-----	-----	-----	-----	0.0133	0.0107	0.
1 1216	1	-----	-----	-----	-----	0.0134	0.0111	0.
1 1230	15	0.001	0.328	0.091	0.417	0.0115	0.0091	0.
1 1245	30	0.001	0.317	0.091	0.401	0.0111	0.0087	0.
1 1300	45	0.001	0.316	0.111	0.435	0.0096	0.0068	0.
1 1315	60	0.001	0.319	0.092	0.403	0.0095	0.0066	0.
1 1330	75	0.001	0.309	0.091	0.408	0.0122	0.0090	0.
1 1345	90	0.001	0.301	0.092	0.402	0.0110	0.0085	0.
1 1400	105	0.001	0.301	0.085	0.419	0.0110	0.0085	0.
1 1415	120	0.001	0.299	0.083	0.407	0.0118	0.0089	0.

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	THC PPMC BYRON	THC PPMC BK6800-1	METHANE PPM BYRON	METHANE PPM PN-1	METHANE PPM BK6800-1	CO PPM BYRON	P PPM BK6
1 1145	-30	-----	-----	-----	-----	-----	-----	---
1 1205	-10	1.68	2.04	1.51	-----	1.64	1.17	3
1 1215	0	-----	-----	-----	1.80	-----	-----	---
1 1230	15	1.64	1.65	1.48	-----	1.64	1.16	4
1 1245	30	1.69	1.60	1.69	-----	1.65	1.47	4
1 1300	45	1.67	1.58	1.57	-----	1.65	1.44	4
1 1315	60	1.67	1.56	1.62	-----	1.82	1.79	4
1 1330	75	1.66	1.56	1.58	-----	1.65	1.82	4
1 1345	90	1.64	1.51	1.68	-----	1.63	1.97	4
1 1400	105	1.63	1.45	1.71	-----	1.64	2.00	5
1 1415	120	1.71	1.49	1.40	1.84	1.64	2.00	5
1 1418	123	-----	-----	-----	-----	-----	-----	---

----- NO DATA TAKEN

NOTES

A SHADOW FROM FRAME

X-UNC PPM NOX-1	PROPANE PPM DMS-1	PROPENE PPM DMS-1	LNC3/C3= DORIC-1	T DEG C DORIC-1	DEW PT DEG C EG&G	UV RAD MW/CM2 EPPLEY	NMHC PPMC BYRON
0.429	-----	-----	-----	26.2	1.5	-----	0.04
-----	0.0133	0.0107	0.2173	-----	-----	-----	-----
-----	0.0134	0.0111	0.1855	-----	-----	-----	-----
0.417	0.0115	0.0091	0.2298	28.4	-----	3.36	0.04
0.401	0.0111	0.0087	0.2393	29.1	-----	3.17	0.04
0.435	0.0096	0.0068	0.3427	30.0	-----	3.12	0.04
0.403	0.0095	0.0066	0.3619	29.1	-----	2.24	0.01
0.408	0.0122	0.0090	0.3039	29.4	-----	2.38	0.01
0.402	0.0110	0.0085	0.2612	29.6	-----	2.43	0.01
0.419	0.0110	0.0085	0.2612	29.6	-----	2.38	0.01
0.407	0.0118	0.0089	0.2821	30.0	-----	2.38	0.01

ETHANE PPM PN-1	METHANE PPM BK6800-1	CO PPM BYRON	CO PPM BK6800-1	HCHO PPM CA	BENZENE PPM 10'C-600	ACETONE PPM 10'C-600
-----	-----	-----	-----	0.005	-----	-----
-----	1.64	1.17	3.72	-----	-----	-----
1.80	-----	-----	-----	-----	0.0002	0.0005
-----	1.64	1.16	4.00	-----	-----	-----
-----	1.65	1.47	4.18	-----	-----	-----
-----	1.65	1.44	4.43	-----	-----	-----
-----	1.82	1.79	4.62	-----	-----	-----
-----	1.65	1.82	4.73	-----	-----	-----
-----	1.63	1.97	4.98	-----	-----	-----
-----	1.64	2.00	5.03	-----	-----	-----
1.84	1.64	2.00	5.17	-----	0.0007	0.0004
-----	-----	-----	-----	0.006	-----	-----

AFF- 66
PROPENE-NOX CONDITIONING
1981 MARCH 25

0715: START FILL WITH 26% R.H. PURE AIR
DEW POINT: 0.5
0830: FILL ENDED
0834: INJECT 11 ML. NO2
0836: INJECT 12 ML. NO
0838: INJECT 22 ML. PROPENE
0930: BAG UNCOVERED, T=0
1430: RUN OVER

T=0 AT 930 PST

BAG NO. 21 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	14.6	2.0	DEG C
UV RAD	EPPLEY	2.44	0.25	MW/CM2

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.177	PPM
NO2-UNC	B-NOX-1	0.160	PPM
PROPENE	DMS-1	0.4089	PPM

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038-2
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479
4130	EPPLEY	ARB LAB; EPPLEY 11692 UV RADIOMETER
4250	BYRON	BYRON HC ANALYZER MD 401
2200	DMS-1	RM-121; DIMETHYLSULFOLANE; FID
2100	PN-1	RM 121; POROPAK N ; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	PROPENE PPM DMS-1	T DEG C DORIC-1	UV R MW/C EPPLE
1 855	-35	-----	-----	-----	-----	-----	-----	-----
1 915	-15	0.001	0.177	0.160	0.340	-----	10.8	-----
1 930	0	-----	-----	-----	-----	0.4089	-----	-----
1 1030	60	0.005	0.129	0.177	0.326	-----	14.3	2.2
1 1130	120	0.018	0.074	0.227	0.310	-----	15.7	2.7
1 1230	180	0.070	0.023	0.266	0.290	-----	15.8	2.6
1 1330	240	0.159	0.012	0.247	0.258	-----	15.8	2.2
1 1420	290	-----	-----	-----	-----	-----	-----	-----
1 1430	300	0.253	0.009	0.229	0.238	0.1086	15.2	2.3

----- NO DATA TAKEN

38-2

UNC M X-1	PROPENE PPM DMS-1	T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY	NMHC PPMC BYRON	THC PPMC BYRON	CO PPM BYRON	HCHO PPM CA
---	-----	-----	-----	-----	-----	-----	0.009
340	-----	10.8	-----	0.820	2.42	2.17	-----
---	0.4089	-----	-----	-----	-----	-----	-----
326	-----	14.3	2.24	0.710	2.38	2.42	-----
310	-----	15.7	2.79	0.580	2.32	2.55	-----
290	-----	15.8	2.61	0.430	2.31	2.92	-----
258	-----	15.8	2.24	0.260	2.17	3.30	-----
---	-----	-----	-----	-----	-----	-----	0.222
236	0.1086	15.2	2.31	0.080	2.14	3.20	-----

2

AFF- 67
OZONE DECAY
1981 MARCH 25,26

DAY 1 (MARCH 25)

1615: START FILL WITH 32% R.H. PURE AIR

DEW POINT: 1.0

1710-->1722: INJECT 9 LITERS OF APPROX. 2.2% OZONE

1736-->1740: MIX BAG

1745: [O3] = 2.194

DAY 2 (MARCH 26)

0815: [O3] = 2.018

OZONE DECAY RATES:

OVERNIGHT: 0.58%/HR

DAY 2 : 0.27%/HR

T=0 AT 1745 PST

BAG NO. 21 USED

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
1790	D-1790	DASIBI 1790 OZONE MONITOR

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790
1 1745	0	2.168
2 815	870	1.992
2 1425	1240	1.959

----- NO DATA TAKEN

AFF- 68
PURE AIR PHOTOLYSIS
1981, MAR 27

0915: FILL STARTED. WET: 7.5 PSIG. DRY: 0 PSIG. DEW PT: 5.0 C
RH=48%

1030: BAG UNCOVERED (T=0)

1530: RUN OVER; BAG ROLLED UP.

RESULTS: OZONE FORMATION RATE = 2.2 PPB/HR

T=0 AT 1030 PST

BAG NO. 21 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	17.7	2.3	DEG C
UV RAD	EPPLEY	1.17		MW/CM2

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
2200	DMS-1	RM-121; DIMETHYLSULFOLANE; FID
2100	PN-1	RM 121; POROPAK N ; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600; FID
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038-2
880	EG&G	EG&G DEW POINT HYGROMETER
1800	DORIC-1	DORIC TEMP INDICATOR; SN 61479
4000	ECH-J	AF-LAB; 12' 5% CARBOWAX-600; FID
4130	EPPLEY	ARB LAB; EPPLEY 11692 UV RADIOMETER
4250	BYRON	BYRON HC ANALYZER MD 401
4300	TSI 023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET DPC MD:208 SN76-148
4400	MRI 388	MRI INTEGRATING NEPHELOMETER MD:1550B
4200	CNC-143	ENV. ONE CNC MD:RICH100, SN:143
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	T DEG C DORIC-1	DEW PT DEG C EG&G	UV MW/ EPP
1 1020	-10	0.000	0.009	0.017	0.024	16.1	5.000	---
1 1100	30	0.002	-----	-----	-----	-----	-----	---
1 1130	60	0.004	-----	-----	-----	-----	-----	---
1 1200	90	0.004	-----	-----	-----	-----	-----	---
1 1230	120	0.006	-----	-----	-----	-----	-----	---
1 1300	150	0.007	-----	-----	-----	-----	-----	---
1 1330	180	0.007	-----	-----	-----	-----	-----	---
1 1400	210	0.007	-----	-----	-----	-----	-----	---
1 1430	240	0.008	-----	-----	-----	-----	-----	---
1 1500	270	0.010	-----	-----	-----	-----	-----	---
1 1530	300	0.011	0.012	0.040	0.048	19.3	-----	1.

----- NO DATA TAKEN

12 NOV 1961

PAGE 1

DEW PT: 5.0 C

00038-2

13

ID: 3030

550B

IX-UNC	T	DEW PT	UV RAD	PAN	AER.V	AER.N	AER.S
PPH	DEG C	DEG C	MW/CM2	PPM	UM3/CC	PART/CC	UM2/CC
NOX-1	DORIC-1	EG&G	EPPLEY	ECD-3	TSI 023	TSI 023	TSI 023
0.024	16.1	5.000	-----	0.000	-1.	-51.	-4.
-----	-----	-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----	-----	-----
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0.048	19.3	-----	1.17	-----	0.	3149.	21.

2

AFF- 68
PURE AIR PHOTOLYSIS
1981, MAR 27

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	NMHC PPMC BYRON	THC PPMC BYRON	METHANE PPM BYRON	METHANE PPM PN-1	ETHENE PPM PN-1	ETHANE PPM PN-1	ACETY PPM DMS-
1 1020	-10	0.100	1.33	1.29	1.82	-----	0.0053	0.00
1 1100	30	-----	-----	-----	-----	0.0042	0.0054	-----
1 1530	300	0.600	2.10	1.90	2.08	0.0273	0.0123	0.00
1 1600	330	-----	-----	-----	1.42	0.0017	0.0051	0.00

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	I-C4= PPM DMS-1	TOLUENE PPM 10'C-600	CO PPM BYRON	HCHO PPM CA	CONDENS 10E3/CC CNC-143	#PART>.3 PART/CC CLIMET	#PART PART/ CLIM
1 1020	-10	0.0004	0.001	0.20	-----	0.3	0.	0
1 1045	15	-----	-----	-----	0.008	-----	-----	-----
1 1520	290	-----	-----	-----	0.004	-----	-----	-----
1 1530	300	0.0004	0.003	0.23	-----	0.2	1.	0
1 1600	330	0.0001	-----	-----	-----	-----	-----	-----

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	PART.075 PART/CC TSI 023	PART.133 PART/CC TSI 023	PART.237 PART/CC TSI 023	PART.422 PART/CC TSI 023	PART.750 PART/CC TSI 023
1 1020	-10	44.	-24.	12.	0.	-4.
1 1530	300	533.	-24.	0.	7.	0.

----- NO DATA TAKEN

NOTES

A DIRECTLY FROM BAG.

NAME	ETHENE PPM PN-1	ETHANE PPM PN-1	ACETYLEN PPM DMS-1	ACETYLEN PPM PN-1	I-C4 PPM DMS-1	N-BUTANE PPM DMS-1	1-C4= PPM DMS-1
1	-----	0.0053	0.0024	0.0020	0.0064	0.002	0.0004
2	0.0042	0.0054	-----	0.0026	-----	-----	-----
8	0.0273	0.0123	0.0070	0.0073	-----	0.006	0.0002
42	0.0017	0.0051	0.0026	0.0026 A	0.0037	0.001	0.0002

HO	CONDENS 10E3/CC CNC-143	#PART>.3 PART/CC CLIMET	#PART>.5 PART/CC CLIMET	#PART>1 PART/CC CLIMET	BSCAT 10-4 M-1 MRI 388	PART.024 PART/CC TSI 023	PART.042 PART/CC TSI 023
---	0.3	0.	0.	0.	0.2	-167.	87.
008	-----	-----	-----	-----	-----	-----	-----
004	-----	-----	-----	-----	-----	-----	-----
---	0.2	1.	0.	0.	0.4	1503.	1131.
---	-----	-----	-----	-----	-----	-----	-----

.422	PART.750
/CC	PART/CC
023	TSI 023
0.	-4.
7.	0.

AFF- 69
NOX-AIR IRRADIATION
1981, APR 6

1010: START FILL, DEW PT: 12.5 C, R.H.= 35%
1116: INJECTED 5.5 ML NO2
1119: INJECTED 18.0 ML NO
1121: INJECTED .4 ML EACH OF PROPANE AND PROPENE
1145: UNCOVER BAG (T=0)
1345: RUN OVER

RESULTS:

CALC. AVG. OH = $30.8 * D \ln(\text{PROPANE}/\text{PROPENE})/DT = 0.033 \text{ PPT}$
CALC. RAD. INPUT = $16.0 * (\text{AVG.OH}) * (60 + \text{MIN.AVG.NO2}) = .065 \text{ PPB/MIN}$
-D(NO)/DT = 0.08 PPB/MIN

T=0 AT 1145 PST

BAG NO. 21 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS
T	DORIC-1	32.3	1.4	DEG C
UV RAD	EPPLEY	3.58	0.27	MW/CM2
HYDROXYL		0.004	0.094	PPT

ID	INST.	INITIAL CONC.	UNITS
NO	B-NOX-1	0.371	PPM
NO2-UNC	B-NOX-1	0.125	PPM
PROPANE	DMS-1	0.0100	PPM
PROPENE	DMS-1	0.0086	PPM

INSTRUMENTS USED

ID	LABEL	DESCRIPTION
2100	PN-1	RM 121; POROPAK N ; FID
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX NOX ANALYZER MD8101BX SN300038-2
4850	BK6800-1	BECKMAN HYDROCARBON GC MD 6800 SN100015D
880	EG&G	EG&G DEW POINT HYGROMETER
1800	DORIC-1	DORIC TEMP INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12" 5% CARBOWAX-600; FID
4130	EPPLEY	ARB LAB; EPPLEY 11692 UV RADIOMETER
2200	DMS-1	RM-121; DIMETHYLSULFOLANE; FID
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600; FID
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS

AFF- 69
NOX-AIR IRRADIATION
1981, APR 6

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	OZONE PPM D-1790	NO PPM B-NOX-1	NO2-UNC PPM B-NOX-1	NOX-UNC PPM B-NOX-1	PROPANE PPM DMS-1	PROPENE PPM DMS-1	LNC3/
1 1135	-10	0.000	0.371	0.125	0.500	0.0088	0.0070	0.43
1 1145	0	-----	-----	-----	-----	0.0100	0.0086	0.35
1 1200	15	0.001	0.375	0.126	0.500	0.0114	0.0112	0.38
1 1215	30	0.002	0.371	0.125	0.500	0.0116	0.0094	0.41
1 1230	45	0.002	0.370	0.129	0.500	0.0125	0.0097	0.45
1 1245	60	0.002	0.369	0.123	0.500	0.0125	0.0096	0.46
1 1300	75	0.001	0.368	0.122	0.500	0.0123	0.0094	0.47
1 1315	90	0.001	0.365	0.128	0.500	0.0124	0.0094	0.47
1 1330	105	0.001	0.367	0.123	0.500	0.0105	0.0080	0.48
1 1345	120	0.001	0.366	0.123	0.500	0.0121	0.0091	0.48

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	CO PPM DK6800-1	HCHO PPM CA	PAN PPM ECD-3
1 1125	-20	-----	0.010	-----
1 1135	-10	1.55	-----	0.000
1 1200	15	1.57	-----	-----
1 1215	30	1.64	-----	-----
1 1230	45	1.65	-----	-----
1 1245	60	1.72	-----	-----
1 1300	75	1.69	-----	-----
1 1315	90	1.64	-----	-----
1 1320	95	-----	0.044	-----
1 1330	105	1.76	-----	-----
1 1345	120	1.76	-----	0.000

----- NO DATA TAKEN

12 NOV 1981
PAGE 2

X-UNC PPM NOX-1	PROPANE PPM DMS-1	PROPENE PPM DMS-1	LNC3/C3=	T DEG C DORIC-1	THC PPMC BK6800-1	DEW PT DEG C EG&G	UV RAD MW/CM2 EPPLEY
0.500	0.0088	0.0070	0.4340	29.3	1.34	12.50	-----
-----	0.0100	0.0086	0.3520	-----	-----	-----	-----
0.500	0.0114	0.0112	0.3890	31.0	1.27	-----	3.95
0.500	0.0116	0.0094	0.4180	33.3	1.29	-----	3.92
0.500	0.0125	0.0097	0.4530	32.3	1.25	-----	3.47
0.500	0.0125	0.0096	0.4670	32.2	1.24	-----	3.81
0.500	0.0123	0.0094	0.4700	33.2	1.25	-----	3.36
0.500	0.0124	0.0094	0.4790	33.1	1.19	-----	3.51
0.500	0.0105	0.0080	0.4820	33.6	1.19	-----	3.36
0.500	0.0121	0.0091	0.4890	33.1	1.21	-----	3.28

2

AFF- 70
JP-8(PET) VARIABLE NOX
1981, APR 7-8

DAY 1 (APRIL 7)

0515: STARTED FILL. WET: 6.2 PSIG; DRY: 0 PSIG; DEW PT: 9.0C; RH=53%
0633-0705: 1000 MICROLITERS JP-8(PET) INJECTED. 2 MINUTES OF N2 ONLY,
THEN HEAT FOR 30 MINUTES AT 250 C.

0720: DIVIDE BAG

0730: INJECTED 2.5 ML NO2 INTO SIDE A

0732: INJECTED 7.6 ML NO INTO SIDE A

0749: INJECTED 1.3 ML NO2 INTO SIDE B

0757: INJECTED 3.8 ML NO INTO SIDE B

0930: IT WAS DISCOVERED THAT THE NEPHELOMETER WAS LEAKING BADLY.

IN ORDER TO START THE RUN, IT WAS BYPASSED.

1003: UNCOVER BAG (T=0)

1100: SOME CLOUDINESS

1630: BAG COVERED FOR THE NIGHT

DAY 2 (APRIL 8)

0810: BOTH SIDES ARE ~60% FULL

0900: BAG UNCOVERED

1000: QUITE CLOUDY

1130: SKY IS CLEARING

1520: RUN OVER

RESULTS

DAY 1

DAY 2

AVG. T (DEG. C)

24(+2)

23(+3)

AVG. UV (MW/CM2)

2.4(+0.8)

2.8(+0.7)

T=0 AT 1003 PST

BAG NO. 21 USED

ID	INST.	AVERAGE VALUE	S.DEV	UNITS	
T	DORIC-1	22.4	4.7	DEG C	SIDE 1
T	DORIC-1	21.6	3.7	DEG C	SIDE 2
UV RAD	EPFLEY-2	2.58	0.80	MW/CM2	
DEW PT	EG&G	9.0		DEG C	SIDE 1
DEW PT	EG&G	9.0		DEG C	SIDE 2

ID	INST.	INITIAL CONC.	UNITS	
NO	B-NOX-1	0.329	PPM	SIDE 1
NO	B-NOX-1	0.156	PPM	SIDE 2
NO2-UNC	B-NOX-1	0.143	PPM	SIDE 1
NO2-UNC	B-NOX-1	0.080	PPM	SIDE 2
THC	BK6800-1	27.70	PPMC	SIDE 1
THC	BK6800-1	28.40	PPMC	SIDE 2

AFF- 70
JP-8(PET) VARIABLE NOX
1981, APR 7-8

INSTRUMENTS USED

SAMPLING
RATE
(ML/MIN)

ID	LABEL	DESCRIPTION
2920	10'C-600	RM-121; 10' 10% CARBOWAX-600 GC; FID
2200	DMS-1	RM-121; DIMETHYLSULFOLANE GC; FID
2100	PN-1	RM-121 POROPAK-N GC; FID
2650	VAR 3700	VARIAN GC; 30M SE-54 QUARTZ CAP. GC; FID
1790	D-1790	DASIBI 1790 OZONE MONITOR
4600	B-NOX-1	BENDIX 8101BX NOX ANALYZER; SN300038-2
4850	BK6800-1	BECKMAN CO, HC ANALYZER SN:100015D
880	EG&G	EG&G DEW POINT HYGROMETER
1800	DORIC-1	DORIC TEMPERATURE INDICATOR, SN 61479
4000	ECD-3	AF-LAB; 12" 5% CARBOWAX-600 GC; ECD
4250	BYRON	BYRON 401 HYDROCARBON ANALYZER
4300	TSI-023	TSI ELECTRICAL AEROSOL ANALYZER MD:3030
4350	CLIMET	CLIMET 208 OPTICAL PART. CTR;SN:76-148
4200	CNC-143	ENV ONE RICH100 CONDENS NUCLEI CTR;SN143
3000	CA	CHROMOTROPIC ACID HCHO ANALYSIS
4131	EPPLEY-2	EPPLEY 14290 UV RADIOMETER; UNDER BAG

AFF- 70
JP-8(PET) VARIABLE NOX
1981, APR 7-8

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 OZONE PPM D-1790	SIDE 2 OZONE PPM D-1790	SIDE 1 NO PPM B-NOX-1	SIDE 2 NO PPM B-NOX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SI NOX PPM B-N
1 615	-228	0.000	0.000	0.009	0.009	0.016	0.016	0
1 945	-18	0.015 A	-----	0.329	-----	0.143	-----	0
1 955	-8	-----	0.014 A	-----	0.156	-----	0.080	---
1 1105	62	0.030	-----	0.260	-----	0.182	-----	0
1 1115	72	-----	0.014	-----	0.103	-----	0.116	---
1 1205	122	0.037	-----	0.197	-----	0.232	-----	0
1 1215	132	-----	0.042	-----	0.056	-----	0.146	---
1 1305	182	0.040	-----	0.121	-----	0.298	-----	0
1 1315	192	-----	0.082	-----	0.027	-----	0.162	---
1 1405	242	0.075	-----	0.057	-----	0.332	-----	0
1 1415	252	-----	0.145	-----	0.015	-----	0.148	---
1 1505	302	0.110	-----	0.029	-----	0.339	-----	0
1 1515	312	-----	0.202	-----	0.011	-----	0.128	---
1 1605	362	0.137	-----	0.018	-----	0.325	-----	0
1 1615	372	-----	0.199	-----	0.011	-----	0.108	---
2 835	1352	0.022	-----	0.010	-----	0.127	-----	0
2 845	1362	-----	0.141	-----	0.009	-----	0.030	---
2 1005	1442	0.132	-----	0.011	-----	0.104	-----	0
2 1015	1452	-----	0.139	-----	0.009	-----	0.037	---
2 1105	1502	0.216	-----	0.009	-----	0.090	-----	0
2 1115	1512	-----	0.148	-----	0.009	-----	0.039	---
2 1205	1562	0.289	-----	0.010	-----	0.078	-----	0
2 1215	1572	-----	0.160	-----	0.010	-----	0.039	---
2 1305	1622	0.328	-----	0.010	-----	0.070	-----	0
2 1315	1632	-----	0.175	-----	0.010	-----	0.039	---
2 1405	1682	0.341	-----	0.010	-----	0.069	-----	0
2 1415	1692	-----	0.179	-----	0.011	-----	0.042	---
2 1505	1742	0.338	-----	0.010	-----	0.069	-----	0
2 1515	1752	-----	0.186	-----	0.012	-----	0.036	---

----- NO DATA TAKEN

12 NOV 1981

PAGE 3

DE 2 NO PM NOX-1	SIDE 1 NO2-UNC PPM B-NOX-1	SIDE 2 NO2-UNC PPM B-NOX-1	SIDE 1 NOX-UNC PPM B-NOX-1	SIDE 2 NOX-UNC PPM B-NOX-1	SIDE 1 THC PPMC BK6800-1	SIDE 2 THC PPMC BK6800-1
.009	0.016	0.016	0.022	0.022	1.22	1.22
----	0.143	-----	0.491	-----	27.70	-----
.156	-----	0.080	-----	0.237	-----	28.40
----	0.182	-----	0.465	-----	26.80	-----
.103	-----	0.116	-----	0.218	-----	27.90
----	0.232	-----	0.450	-----	26.70	-----
.056	-----	0.146	-----	0.202	-----	27.90
----	0.298	-----	0.431	-----	26.60	-----
.027	-----	0.162	-----	0.182	-----	27.60
----	0.332	-----	0.396	-----	26.20	-----
.015	-----	0.148	-----	0.158	-----	27.20
----	0.339	-----	0.363	-----	25.90	-----
.011	-----	0.128	-----	0.134	-----	26.60
----	0.325	-----	0.340	-----	25.80	-----
.011	-----	0.108	-----	0.114	-----	26.40
----	0.127	-----	0.131	-----	23.30	-----
.009	-----	0.030	-----	0.034	-----	25.30
----	0.104	-----	0.111	-----	23.30	-----
.009	-----	0.037	-----	0.039	-----	25.30
----	0.090	-----	0.095	-----	23.00	-----
.009	-----	0.039	-----	0.041	-----	25.60
----	0.078	-----	0.081	-----	23.10	-----
.010	-----	0.039	-----	0.044	-----	25.50
----	0.070	-----	0.075	-----	22.90	-----
.010	-----	0.039	-----	0.045	-----	25.40
----	0.069	-----	0.073	-----	22.80	-----
.011	-----	0.042	-----	0.048	-----	25.10
----	0.069	-----	0.076	-----	22.90	-----
.012	-----	0.036	-----	0.044	-----	25.30

2

AFF- 70
JP-8(PET) VARIABLE NOX
1981, APR 7-8

CLOCK TIME		ELAPSED TIME	SIDE 1 NMHC PPMC BYRON	SIDE 2 NMHC PPMC BYRON	SIDE 1 T DEG C DORIC-1	SIDE 2 T DEG C DORIC-1	UV RAD MW/CM2 EPPLEY-2	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143
1	615	-228	0.10	0.10	12.9	12.9	-----	0.0	0
1	945	-18	25.70	-----	18.6	-----	-----	12.5	---
1	955	-8	-----	29.00	-----	19.2	-----	-----	11
1	1105	62	24.30	-----	22.3	-----	2.24	54.0	---
1	1115	72	-----	26.60	-----	21.2	2.38	-----	49
1	1205	122	23.80	-----	26.8	-----	3.73	37.0	---
1	1215	132	-----	27.00	-----	25.2	2.61	-----	32
1	1305	182	25.20	-----	26.0	-----	3.17	27.0	---
1	1315	192	-----	-----	-----	23.4	3.17	-----	24
1	1405	242	22.40	-----	27.2	-----	2.73	20.0	---
1	1415	252	-----	25.10	-----	24.5	2.54	-----	18
1	1505	302	24.00	-----	25.4	-----	1.98	14.0	---
1	1515	312	-----	24.70	-----	23.0	1.83	-----	13
1	1605	362	22.20	-----	21.3	-----	1.05	10.9	---
1	1615	372	-----	24.70	-----	20.3	0.93	-----	9
2	835	1352	19.70	-----	14.8	-----	-----	0.0	---
2	845	1362	-----	22.30	-----	15.3	-----	-----	0
2	1005	1442	19.80	-----	17.9	-----	1.85	6.7	---
2	1015	1452	-----	20.70	-----	19.4	2.24	-----	13
2	1105	1502	19.20	-----	19.7	-----	3.36	4.0	---
2	1115	1512	-----	21.90	-----	21.8	3.62	-----	8
2	1205	1562	19.70	-----	24.2	-----	3.69	2.3	---
2	1215	1572	-----	21.70	-----	24.6	3.54	-----	4
2	1305	1622	19.70	-----	26.3	-----	3.28	1.0	---
2	1315	1632	-----	21.60	-----	23.6	3.02	-----	2
2	1405	1682	19.00	-----	26.0	-----	2.73	1.0	---
2	1415	1692	-----	19.90	-----	24.9	2.57	-----	1
2	1505	1742	17.10	-----	26.5	-----	1.90	0.4	---
2	1515	1752	-----	20.30	-----	24.6	1.71	-----	0

----- NO DATA TAKEN

IDE 2 T REG C RIC-1	UV RAD MW/CM2 EPPLEY-2	SIDE 1 CONDENS 10E3/CC CNC-143	SIDE 2 CONDENS 10E3/CC CNC-143	SIDE 1 #PART>.3 PART/CC CLIMET	SIDE 2 #PART>.3 PART/CC CLIMET	SIDE 1 #PART>.5 PART/CC CLIMET	SIDE 2 #PART>.5 PART/CC CLIMET
2.9	-----	0.0	0.0	-----	-----	-----	-----
	-----	12.5	-----	0.	-----	0.	-----
9.2	-----	-----	11.5	-----	0.	-----	0.
	2.24	54.0	-----	0.	-----	0.	-----
1.2	2.38	-----	49.0	-----	0.	-----	0.
	3.73	37.0	-----	0.	-----	0.	-----
5.2	2.61	-----	32.0	-----	0.	-----	0.
	3.17	27.0	-----	1.	-----	0.	-----
3.4	3.17	-----	24.0	-----	2.	-----	0.
	2.73	20.0	-----	39.	-----	0.	-----
4.5	2.54	-----	18.0	-----	67.	-----	0.
	1.98	14.0	-----	178.	-----	7.	-----
3.0	1.83	-----	13.0	-----	209.	-----	13.
	1.05	10.9	-----	278.	-----	40.	-----
0.3	0.93	-----	9.0	-----	307.	-----	55.
	-----	0.0	-----	130.	-----	9.	-----
5.3	-----	-----	0.0	-----	134.	-----	11.
	1.85	6.7	-----	114.	-----	44.	-----
9.4	2.24	-----	13.2	-----	101.	-----	12.
	3.36	4.0	-----	226.	-----	59.	-----
1.8	3.62	-----	8.2	-----	78.	-----	10.
	3.69	2.3	-----	355.	-----	123.	-----
4.6	3.54	-----	4.7	-----	59.	-----	9.
	3.28	1.0	-----	380.	-----	165.	-----
3.6	3.02	-----	2.0	-----	45.	-----	11.
	2.73	1.0	-----	380.	-----	182.	-----
4.9	2.57	-----	1.5	-----	49.	-----	12.
	1.90	0.4	-----	372.	-----	162.	-----
4.6	1.71	-----	0.7	-----	77.	-----	11.

AFF- 70
JP-8(PET) VARIABLE NOX
1981, APR 7-8

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 #PART>1 PART/CC CLIMET	SIDE 2 #PART>1 PART/CC CLIMET	SIDE 1 AER.V UM3/CC TSI-023	SIDE 2 AER.V UM3/CC TSI-023	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE AER. UM2/ TSI-0
1 615	-228	-----	-----	1.	1.	64.	64.	4
1 945	-18	0.	-----	3.	-----	2.3E 04	-----	186
1 955	-8	-----	0.	-----	2.	-----	1.7E 04	----
1 1105	62	0.	-----	17.	-----	5.7E 04	-----	809
1 1115	72	-----	0.	-----	17.	-----	9.9E 04	-----
1 1205	122	0.	-----	32.	-----	7.3E 04	-----	1391
1 1215	132	-----	0.	-----	35.	-----	6.6E 04	-----
1 1305	182	0.	-----	53.	-----	4.9E 04	-----	1924
1 1315	192	-----	0.	-----	127.	-----	=37681	-----
1 1405	242	0.	-----	78.	-----	4.1E 04	-----	2336
1 1415	252	-----	0.	-----	89.	-----	3.6E 04	-----
1 1505	302	0.	-----	94.	-----	3.3E 04	-----	2501
1 1515	312	-----	0.	-----	108.	-----	3.0E 04	-----
1 1605	362	0.	-----	104.	-----	2.4E 04	-----	2419
1 1615	372	-----	0.	-----	107.	-----	2.4E 04	-----
2 805	1322	-----	-----	-----	-----	-----	-----	-----
2 835	1352	0.	-----	4.	-----	10.	-----	47
2 845	1362	-----	0.	-----	3.	-----	40.	-----
2 1005	1442	0.	-----	44.	-----	1.5E 04	-----	1154
2 1015	1452	-----	0.	-----	20.	-----	2.6E 04	-----
2 1105	1502	1.	-----	69.	-----	1.2E 04	-----	1386
2 1115	1512	-----	0.	-----	27.	-----	1.8E 04	-----
2 1205	1562	3.	-----	72.	-----	6546.	-----	1249
2 1215	1572	-----	0.	-----	29.	-----	1.4E 04	-----
2 1305	1622	7.	-----	63.	-----	4762.	-----	989
2 1315	1632	-----	0.	-----	30.	-----	87.0.	-----
2 1405	1682	9.	-----	51.	-----	3457.	-----	764
2 1415	1692	-----	0.	-----	29.	-----	5519.	-----
2 1505	1742	8.	-----	38.	-----	2494.	-----	551
2 1515	1752	-----	0.	-----	23.	-----	3217.	-----

----- NO DATA TAKEN

	SIDE 1 AER.N PART/CC TSI-023	SIDE 2 AER.N PART/CC TSI-023	SIDE 1 AER.S UM2/CC TSI-023	SIDE 2 AER.S UM2/CC TSI-023	SIDE 1 N-C5 PPM DMS-1	SIDE 2 N-C5 PPM DMS-1
	64.	64.	4.	4.	-----	-----
	2.3E 04	-----	186.	-----	0.0017	-----
	-----	1.7E 04	-----	144.	-----	-----
	5.7E 04	-----	809.	-----	-----	-----
	-----	9.9E 04	-----	934.	-----	-----
	7.3E 04	-----	1391.	-----	-----	-----
	-----	6.6E 04	-----	1519.	-----	-----
	4.9E 04	-----	1924.	-----	-----	-----
	-----	=37681	-----	5153.	-----	-----
	4.1E 04	-----	2336.	-----	-----	-----
	-----	3.6E 04	-----	2564.	-----	-----
	3.3E 04	-----	2501.	-----	-----	-----
	-----	3.0E 04	-----	2643.	-----	0.0015
	2.4E 04	-----	2419.	-----	0.0017	-----
	-----	2.4E 04	-----	2412.	-----	-----
	-----	-----	-----	-----	-----	0.0009
	10.	-----	47.	-----	0.0007	-----
	-----	40.	-----	43.	-----	-----
	1.5E 04	-----	1154.	-----	-----	-----
	-----	2.6E 04	-----	765.	-----	-----
	1.2E 04	-----	1386.	-----	-----	-----
	-----	1.8E 04	-----	925.	-----	-----
	6546.	-----	1249.	-----	-----	-----
	-----	1.4E 04	-----	884.	-----	-----
	4762.	-----	989.	-----	-----	-----
	-----	8780.	-----	761.	-----	-----
	3457.	-----	764.	-----	-----	-----
	-----	5519.	-----	636.	-----	0.0007
	2494.	-----	551.	-----	0.0008	-----
	-----	3217.	-----	487.	-----	-----

AFF- 70
JP-8(PET) VARIABLE NOX
1981, APR 7-8

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 N-C10 PPM VAR 3700	SIDE 2 N-C10 PPM VAR 3700	SIDE 1 N-C11 PPM VAR 3700	SIDE 2 N-C11 PPM VAR 3700	SIDE 1 N-C12 PPM VAR 3700	SIDE 2 N-C12 PPM VAR 3700	SI N- P VAR
1 945	-18	0.0299	0.0299	0.1009	0.1009	0.1094	0.1094	0.
1 1115	72	-----	0.0282	-----	0.1011	-----	0.1149	--
1 1227	144	0.0285	-----	0.1004	-----	0.1170	-----	0.
1 1327	204	-----	0.0277	-----	0.0985	-----	0.1142	--
1 1448	285	0.0270	-----	0.0981	-----	0.1127	-----	0.
1 1555	352	-----	0.0278	-----	0.1002	-----	0.1137	--
2 835	1352	0.0290	-----	0.0963	-----	0.1149	-----	0.
2 1015	1452	-----	0.0283 B	-----	0.1020 B	-----	0.0116 B	--
2 1105	1502	0.0263	-----	0.0913	-----	0.1001	-----	--
2 1215	1572	-----	0.0263	-----	0.0914	-----	0.1003	--
2 1335	1652	0.0254	-----	0.0891	-----	0.1011	-----	0.
2 1447	1724	-----	0.0260	-----	0.0934	-----	0.1044	--

----- NO DATA TAKEN

SIDE 2 -C11 PPM R 3700	SIDE 1 N-C12 PPM VAR 3700	SIDE 2 N-C12 PPM VAR 3700	SIDE 1 N-C13 PPM VAR 3700	SIDE 2 N-C13 PPM VAR 3700	SIDE 1 N-C14 PPM VAR 3700	SIDE 2 N-C14 PPM VAR 3700
.1009	0.1094	0.1094	0.0744	0.0744	-----	-----
.1011	-----	0.1149	-----	0.0906	-----	0.052
-----	0.1170	-----	0.0907	-----	0.051	-----
.0985	-----	0.1142	-----	0.0894	-----	0.050
-----	0.1127	-----	0.0872	-----	0.048	-----
.1002	-----	0.1137	-----	0.0875	-----	0.051
-----	0.1149	-----	0.0779	-----	0.050	-----
.1020 B	-----	0.0116 B	-----	0.0095 B	-----	0.055 B
-----	0.1001	-----	-----	-----	-----	-----
.0914	-----	0.1003	-----	0.0718	-----	-----
-----	0.1011	-----	0.0780	-----	0.040	-----
.0934	-----	0.1044	-----	0.0820	-----	0.043

2

AFF- 70
JP-8(PET) VARIABLE NOX
1981, APR 7-8

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 TOLUENE PPM 10'C-600	SIDE 2 TOLUENE PPM 10'C-600	SIDE 1 124TMEBZ PPM VAR 3700	SIDE 2 124TMEBZ PPM VAR 3700	SIDE 1 CO PPM BYRON	SIDE 1 CO PPM BK6800-1	SID C PP BYR
1 615	-228	-----	-----	-----	-----	0.10	0.71	0.
1 945	-18	-----	-----	0.0112	0.0112	-----	0.75	-----
1 955	-8	-----	-----	-----	-----	-----	-----	-----
1 1105	62	-----	-----	-----	-----	0.08	0.78	-----
1 1115	72	-----	-----	-----	0.0096	-----	-----	0.
1 1205	122	-----	-----	-----	-----	0.10	0.85	-----
1 1215	132	-----	-----	-----	-----	-----	-----	0.
1 1227	144	-----	-----	0.0095	-----	-----	-----	-----
1 1305	182	-----	-----	-----	-----	0.10	0.90	-----
1 1315	192	-----	-----	-----	-----	-----	-----	-----
1 1327	204	-----	-----	-----	0.0087	-----	-----	-----
1 1405	242	-----	-----	-----	-----	0.09	0.94	-----
1 1415	252	-----	-----	-----	-----	-----	-----	0.
1 1448	285	-----	-----	0.0082	-----	-----	-----	-----
1 1505	302	-----	-----	-----	-----	0.12	1.08	-----
1 1515	312	-----	0.0007	-----	-----	-----	-----	0.
1 1555	352	-----	-----	-----	0.0085	-----	-----	-----
1 1605	362	0.0005	-----	-----	-----	0.12	1.08	-----
1 1615	372	-----	-----	-----	-----	-----	-----	0.
2 835	1352	-----	-----	0.0114	-----	0.10	1.10	-----
2 845	1362	-----	-----	-----	-----	-----	-----	0.
2 1005	1442	-----	-----	-----	-----	0.17	1.04	-----
2 1015	1452	-----	-----	-----	0.0090	-----	-----	0.
2 1105	1502	-----	-----	0.0078	-----	0.15	1.19	-----
2 1115	1512	-----	-----	-----	-----	-----	-----	0.
2 1205	1562	-----	-----	-----	-----	0.18	1.17	-----
2 1215	1572	-----	-----	-----	0.0080	-----	-----	0.
2 1305	1622	-----	-----	-----	-----	0.18	1.39	-----
2 1315	1632	-----	-----	-----	-----	-----	-----	0.
2 1335	1652	-----	-----	0.0071	-----	-----	-----	-----
2 1405	1682	-----	-----	-----	-----	0.26	1.37	-----
2 1415	1692	-----	-----	-----	-----	-----	-----	0.
2 1447	1724	-----	-----	-----	0.0078	-----	-----	-----
2 1505	1742	-----	-----	-----	-----	0.22	1.48	-----
2 1515	1752	-----	-----	-----	-----	-----	-----	0.

----- NO DATA TAKEN

12 NOV 1981
PAGE 7

	SIDE 1 CO PPM BYRON	SIDE 1 CO PPM BK6800-1	SIDE 2 CO PPM BYRON	SIDE 2 CO PPM BK6800-1	SIDE 1 PAN PPM ECD-3	SIDE 2 PAN PPM ECD-3
2	0.10	0.71	0.10	0.71	0.000	0.000
EBZ	-----	0.75	-----	-----	0.000	-----
	-----	-----	-----	0.62	-----	0.000
	0.08	0.78	-----	-----	0.000	-----
700	-----	-----	0.06	0.73	-----	0.000
	0.10	0.85	-----	-----	0.001	-----
	-----	-----	0.10	0.92	-----	0.002
	-----	-----	-----	-----	-----	-----
	0.10	0.90	-----	-----	0.005	-----
	-----	-----	-----	0.81	-----	0.010
87	-----	-----	-----	-----	-----	-----
	0.09	0.94	-----	-----	0.012	-----
	-----	-----	0.10	0.90	-----	0.019
	-----	-----	-----	-----	-----	-----
	0.12	1.08	-----	-----	0.023	-----
	-----	-----	0.12	1.01	-----	0.030
5	-----	-----	-----	-----	-----	-----
	0.12	1.08	-----	-----	0.032	-----
	-----	-----	0.05	0.97	-----	0.041
	-----	-----	-----	-----	-----	-----
	0.10	1.10	-----	-----	0.032	-----
	-----	-----	0.10	1.05	-----	0.032
	0.17	1.04	-----	-----	0.042	-----
0	-----	-----	0.15	1.17	-----	0.039
	0.15	1.19	-----	-----	0.052	-----
	-----	-----	0.16	1.27	-----	0.040
	0.18	1.17	-----	-----	0.069	-----
0	-----	-----	0.13	1.27	-----	0.041
	0.18	1.39	-----	-----	0.079	-----
	-----	-----	0.17	1.38	-----	0.041
	-----	-----	-----	-----	-----	-----
	0.26	1.37	-----	-----	0.085	-----
	-----	-----	0.21	1.48	-----	0.040
8	-----	-----	-----	-----	-----	-----
	0.22	1.48	-----	-----	0.092	-----
	-----	-----	0.18	1.46	-----	0.041

2

AFF- 70
JP-8(PET) VARIABLE NOX
1981, APR 7-8

CLOCK TIME DY HR.	ELAPSED TIME (MIN)	SIDE 1 HCHO PPM CA	SIDE 2 HCHO PPM CA	SIDE 1 PART.024 PART/CC TSI-023	SIDE 2 PART.024 PART/CC TSI-023	SIDE 1 PART.042 PART/CC TSI-023	SIDE 2 PART.042 PART/CC TSI-023	SID PART PART TSI-
1 615	-228	-----	-----	0.	0.	87.	87.	-4
1 825	-98	0.004	-----	-----	-----	-----	-----	---
1 826	-97	-----	0.005	-----	-----	-----	-----	---
1 945	-18	-----	-----	1.4E 04	-----	4611.	-----	350
1 955	-8	-----	-----	-----	8851.	-----	3915.	---
1 1105	62	-----	-----	1.8E 04	-----	1.7E 04	-----	1.8
1 1115	72	-----	-----	-----	5.6E 04	-----	1.8E 04	---
1 1200	117	0.021	-----	-----	-----	-----	-----	---
1 1201	118	-----	0.039	-----	-----	-----	-----	---
1 1205	122	-----	-----	1.8E 04	-----	1.9E 04	-----	2.5
1 1215	132	-----	-----	-----	8851.	-----	1.7E 04	---
1 1305	182	-----	-----	1336.	-----	696.	-----	2.9
1 1315	192	-----	-----	-----	1002.	-----	=86773	---
1 1405	242	-----	-----	1503.	-----	1827.	-----	1.4
1 1415	252	-----	-----	-----	-2004.	-----	1131.	---
1 1505	302	-----	-----	1837.	-----	783.	-----	506
1 1515	312	-----	-----	-----	1169.	-----	1305.	---
1 1605	362	-----	-----	668.	-----	609.	-----	106
1 1610	367	0.027	-----	-----	-----	-----	-----	---
1 1611	368	-----	0.036	-----	-----	-----	-----	---
1 1615	372	-----	-----	-----	2672.	-----	435.	---
2 830	1347	0.039	-----	-----	-----	-----	-----	---
2 831	1348	-----	0.046	-----	-----	-----	-----	---
2 835	1352	-----	-----	-167.	-----	0.	-----	4
2 845	1362	-----	-----	-----	-167.	-----	0.	---
2 1005	1442	-----	-----	0.	-----	522.	-----	275
2 1015	1452	-----	-----	-----	1837.	-----	2175.	---
2 1105	1502	-----	-----	1169.	-----	957.	-----	-40
2 1115	1512	-----	-----	-----	-501.	-----	0.	---
2 1200	1537	0.039	-----	-----	-----	-----	-----	---
2 1201	1558	-----	0.031	-----	-----	-----	-----	---
2 1205	1562	-----	-----	-501.	-----	435.	-----	8
2 1215	1572	-----	-----	-----	501.	-----	348.	---
2 1305	1622	-----	-----	-167.	-----	348.	-----	13
2 1315	1632	-----	-----	-----	167.	-----	522.	---
2 1405	1682	-----	-----	501.	-----	174.	-----	---
2 1415	1692	-----	-----	-----	-668.	-----	783.	---
2 1500	1737	0.043	-----	-----	-----	-----	-----	---
2 1501	1738	-----	0.051	-----	-----	-----	-----	---
2 1505	1742	-----	-----	334.	-----	261.	-----	8
2 1515	1752	-----	-----	-----	-501.	-----	261.	---

----- NO DATA TAKEN

E 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2	SIDE 1	SIDE 2
.024	PART.042	PART.042	PART.075	PART.075	PART.133	PART.133
/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC	PART/CC
023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023	TSI-023
0.	87.	87.	-44.	-44.	24.	24.
---	---	---	---	---	---	---
---	---	---	---	---	---	---
---	4611.	---	3508.	---	892.	---
1.	---	3915.	---	2975.	---	699.
---	1.7E 04	---	1.8E 04	---	4651.	---
E 04	---	1.8E 04	---	1.9E 04	---	5350.
---	---	---	---	---	---	---
---	---	---	---	---	---	---
---	1.9E 04	---	2.5E 04	---	1.1E 04	---
1.	---	1.7E 04	---	2.7E 04	---	1.2E 04
---	696.	---	2.9E 04	---	1.6E 04	---
2.	---	=86773	---	4.7E 05	---	2.0E 04
---	1827.	---	1.4E 04	---	2.0E 04	---
4.	---	1131.	---	9457.	---	2.3E 04
---	783.	---	5062.	---	1.9E 04	---
9.	---	1305.	---	1776.	---	1.9E 04
---	609.	---	1066.	---	1.6E 04	---
---	---	---	---	---	---	---
---	---	---	---	---	---	---
2.	---	435.	---	1110.	---	1.3E 04
---	---	---	---	---	---	---
---	---	---	---	---	---	---
---	0.	---	44.	---	24.	---
67.	---	0.	---	133.	---	-48.
---	522.	---	2753.	---	9519.	---
37.	---	2175.	---	1.5E 04	---	6314.
---	957.	---	-400.	---	5326.	---
91.	---	0.	---	8081.	---	9688.
---	---	---	---	---	---	---
---	435.	---	89.	---	2434.	---
91.	---	348.	---	2620.	---	8604.
---	348.	---	133.	---	1542.	---
67.	---	522.	---	266.	---	5904.
---	174.	---	0.	---	410.	---
68.	---	783.	---	-44.	---	3567.
---	---	---	---	---	---	---
---	---	---	---	---	---	---
---	261.	---	89.	---	193.	---
01.	---	261.	---	-133.	---	1952.

AFF- 70
JP-8(PET) VARIABLE NOX
1981, APR 7-8

CLOCK TIME BY HR.	ELAPSED TIME (MIN)	SIDE 1 PART.237 PART/CC TSI-023	SIDE 2 PART.237 PART/CC TSI-023	SIDE 1 PART.422 PART/CC TSI-023	SIDE 2 PART.422 PART/CC TSI-023	SIDE 1 PART.750 PART/CC TSI-023	SIDE 2 PART.750 PART/CC TSI-023
1 615	-228	0.	0.	-7.	-7.	4.	4.
1 945	-18	74.	-----	20.	-----	0.	-----
1 955	-8	-----	86.	-----	0.	-----	0.
1 1105	62	185.	-----	127.	-----	4.	-----
1 1115	72	-----	418.	-----	27.	-----	7.
1 1205	122	923.	-----	73.	-----	14.	-----
1 1215	132	-----	1168.	-----	100.	-----	7.
1 1305	182	2054.	-----	167.	-----	25.	-----
1 1315	192	-----	2657.	-----	220.	-----	28.
1 1405	242	4047.	-----	313.	-----	46.	-----
1 1415	252	-----	4563.	-----	420.	-----	49.
1 1505	302	5363.	-----	500.	-----	56.	-----
1 1515	312	-----	6076.	-----	574.	-----	88.
1 1605	362	5818.	-----	640.	-----	84.	-----
1 1615	372	-----	6421.	-----	734.	-----	81.
2 835	1352	61.	-----	40.	-----	7.	-----
2 845	1362	-----	98.	-----	13.	-----	11.
2 1005	1442	2239.	-----	220.	-----	32.	-----
2 1015	1452	-----	455.	-----	53.	-----	14.
2 1105	1502	3936.	-----	487.	-----	70.	-----
2 1115	1512	-----	984.	-----	93.	-----	11.
2 1205	1562	3358.	-----	640.	-----	91.	-----
2 1215	1572	-----	1501.	-----	120.	-----	14.
2 1305	1622	2226.	-----	574.	-----	105.	-----
2 1315	1632	-----	1759.	-----	140.	-----	21.
2 1405	1682	1820.	-----	460.	-----	91.	-----
2 1415	1692	-----	1710.	-----	140.	-----	32.
2 1505	1742	1181.	-----	367.	-----	70.	-----
2 1515	1752	-----	1464.	-----	153.	-----	21.

----- NO DATA TAKEN

NOTES

- A PROBABLE INTERFERENCE BY FUEL COMPONENTS ON THE OZONE MONITOR
- B FORGOT TO FLUSH LOOP BEFORE ENTERING SAMPLE, VALUES LOOK A LITTLE HIGH.

(THE REVERSE OF THIS PAGE IS BLANK.)